## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.00	Rating **	Α	Issue No.		121	
LM End	0.00	Issue Type +	Ма	Location * N/A			
Category	Earthen L	evee		GPS La	atituc	de/Longitude	
Calegory				Start		End	
Item		s & Maintenai	nce		0		0
пеш	Manuals				0		0
DWR ID DWR_RD0524_01_s _ 2012_121							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
The RD has a digital copy of the O&M manual.							

No Photos

LM Start	0.00	Rating **	М	Issue No.		123	
LM End	0.00	Issue Type +	Ма	Location *	N/A		
Category Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Flood Pre	paredness &	Training		0		0
пеш	item				0		0
DWR ID	DWR_RD0	524_01_s _ 201	2_123				
		Comn	nent Cod	le			
Inspector Comment							
No recent	training.						

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.00	Rating **	М	Issue No.		138	
LM End	0.00	Issue Type +	Ma	Location *	N/A		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item		cy Supplies &			0		0
пеш	Equipmer	nt			0		0
DWR ID	WR ID DWR_RD0524_01_s _ 2013_138						
		Comn	nent Cod	de			
Inspector Comment							
The LMA	does not a	ppear to have	emerge	ncy supplie	s or	equipment.	

No Photos

LM Start	0.19	Rating **	U	Issue No.	5		
LM End	0.19	Issue Type +	Ma	Location *	* WS		
Category	Supplemental				GPS Latitude/Longitude		
Calegory	Category			Start		End	
Item	DWR Ero	sion Survey		37.9390	85°	37.939085°	
item					17°	-121.343917°	
DWR ID							
Comment Code							

# Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2016 Site ID:RD0524U01RM40.85]

#### Photo 1 of 3: SJR2016 RD0524U01RM40.85 1.jpg



Close view of the erosion.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

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#### Flood Control Project Maintenance Levee Inspections

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.19	Rating **	U	Issue No.	5 (cont)		
LM End	0.19	Issue Type +	Ma	Location *	WS		
Category	Suppleme	ental		GPS L	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR Eros	DWR Erosion Survey			)85°	37.939085°	
пеш				-121.343917 °		-121.343917°	
DWR ID							
		Comn	nent Cod	de			
Inspector Comment							

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2016 Site ID:RD0524U01RM40.85]

LM Start	0.19	Rating **	U	Issue No.	5 (cont)
LM End	0.19	Issue Type +	Ma	Location *	WS



Close view of the erosion.

#### Photo 3 of 3: SJR2016\_RD0524U01RM40.85\_4.jpg



Close view of the erosion.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.21	Rating **	М	Issue No.		3
LM End	0.21	Issue Type +	Ma	Location *		CR
LIVI ENG	0.21	133dC Type T	ivia	Location		OIX
Category	Earthen L	evee		GPS L	atitud	e/Longitude
Catogory				Start		End
Item		rface / Depres	ssions /	37.9388	890°	37.938890 °
item	Rutting			-121.3436	657°	-121.343657°
DWR ID DWR_RD0524_01_s _ 2016_3						
		Comn	nent Coo	de		
C2 : Repa	ir depressi	ons or ruts in	the crow	n or slope.		
		Inspecto	or Comm	nent		
No change in status.						

Photo 1 of 3: FA_2016_RD0524_107_3_20160929_00007.jpg
A Company of the Comp
The state of the s

Looking west at 3" depression on levee crown. (Spring 2012)

 LM Start
 0.21
 Rating \*\*
 M
 Issue No.
 3 (cont)

 LM End
 0.21
 Issue Type +
 Ma
 Location \*
 CR

Photo 2 of 3 : FA\_2016\_RD0524\_107\_3\_20160929\_00008.jpg

Looking west at depression on levee crown near waterward shoulder.

LM Start	0.21	Rating **	М	Issue No.	3 (cont)
LM End	0.21	Issue Type +	Ma	Location *	CR



Looking east at 3" depression on levee crown. (Spring 2012)

\*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Acceptable M : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.23	Rating **	U	Issue No.		201	
LM End	0.23	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
				Start		End	
Item	Trim / Thin Trees				48°	37.938648°	
item				-121.3434	-80°	-121.343480°	
DWR ID DWR_RD0524_01_f _ 2016_201							
		Comn	nent Cod	de			
T2 : Thin t	rees to allo	w visibility of	the grou	nd and roo	m to	flood fight.	
		Inspecto	or Comm	nent			
Untrimmed trees on waterward slope.							



Looking east at untrimmed tree on landward slope.

LM Start	0.27	Rating **	U	Issue No.		179	
LM End	0.27	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Trim / Thin Trees			37.9384	38°	37.938438°	
item			-121.3428	83°	-121.342883°		
DWR ID DWR_RD0524_01_s _ 2014_179							
Comment Code							
T2: Thin trees to allow visibility of the ground and room to flood fight.							

mspector	Comment

Tree blocking view of waterward slope.

LM Start	0.27	Rating **	U	Issue No.	179 (cont)
LM End	0.27	Issue Type +	Ma	Location *	WS

## Photo 1 of 4 : FA\_2016\_RD0524\_107\_179\_20161013\_00385.jpg



Looking east at untrimmed tree on waterward slope. (Fall 2016)

Photo 2 of 4: FA\_2016\_RD0524\_107\_179\_20160929\_00224.jpg



Looking east at untrimmed tree on waterward slope (Spring 2016)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.27	Rating **	U	Issue No.	179 (cont)	
LM End	0.27	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Trim / Thin Trees			37.9384	38°	37.938438°
пеш	-121.342883 ° -					-121.342883 °
DWR ID DWR_RD0524_01_s _ 2014_179						
		Comn	nent Cod	de		
T2 : Thin trees to allow visibility of the ground and room to flood fight.						
		Inspecto	or Comm	nent		
Tree blocking view of waterward slope.						

Photo 3 of 4 : FA_2016_RD0524_107_179	_20160929_00225.jpg
	A STATE OF THE STA
	TALL A
	- 14 M.

Looking west at untrimmed tree on waterward slope. (Spring 2015)

 LM Start
 0.27
 Rating \*\*
 U
 Issue No.
 179 (cont)

 LM End
 0.27
 Issue Type +
 Ma
 Location \*
 WS

Photo 4 of 4: FA\_2016\_RD0524\_107\_179\_20160929\_00226.jpg



Looking east at untrimmed tree on waterward slope. (Fall 2015)

LM Start	0.30	Rating **	U	Issue No.		174	
LM End	0.30	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
			Start		End		
Item	Animal Control			37.9383	82°	37.938382°	
item				-121.3423	52°	-121.342352°	
DWR ID DWR_RD0524_01_f _ 2014_174							
	Comment Code						

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Several rodent holes present at this site. No change at site during spring 2016 inspection.

#### Photo 1 of 4: FA\_2016\_RD0524\_107\_174\_20161013\_00386.jpg



Looking southwest at several rodent holes on waterward slope. (Fall 2016)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.30	Rating **	U	Issue No.		174 (cont)	
LM End	0.30	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Co		37.938382°		37.938382°		
пеш			-121.342352 °		-121.342352°		
DWR ID DWR_RD0524_01_f _ 2014_174							
		Comn	nent Cod	de			
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.							
Inspector Comment							
Several rodent holes present at this site. No change at site during spring 2016 inspection.							

LM Start	0.30	Rating **	U	Issue No.	174 (cont)
I M End	0.30	Issue Type +	Ma	Location *	W/S



Looking southeast at several rodent holes on waterward slope. (Spring 2016)

Photo 3 of 4: FA\_2016\_RD0524\_107\_174\_20160929\_00218.jpg



Looking west at several rodent holes on waterward shoulder. (Spring 2015)

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.30	Rating **	U	Issue No.		174 (cont)		
LM End	0.30	Issue Type +	Ма	Location *	WS			
Catagony	Catagoni Earthen Levee				GPS Latitude/Longitude			
Category				Start		End		
ltom	Animal Control			37.9383	82°	37.938382°		
item	Item				52°	-121.342352°		
DWR ID DWR_RD0524_01_f _ 2014_174								
		_						

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Several rodent holes present at this site. No change at site during spring 2016 inspection.



Looking southeast at several rodent holes on waterward slope. (Fall 2015.

0.34	Rating **	М	Issue No.		180		
0.34	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude			
					End		
Erosion / Bank Caving				61 °	37.938461 °		
			-121.3416	26°	-121.341626°		
DWR ID DWR_RD0524_01_s _ 2014_180							
Comment Code							
	0.34 Earthen L Erosion /	0.34 Issue Type + Earthen Levee Erosion / Bank Caving  DWR_RD0524_01_s _ 201	0.34 Issue Type + Ma Earthen Levee Erosion / Bank Caving  DWR_RD0524_01_s _ 2014_180	0.34 Issue Type + Ma Location *  Earthen Levee GPS La Start  Erosion / Bank Caving 37.9384 -121.3416.  DWR_RD0524_01_s _ 2014_180	0.34   Issue Type +   Ma   Location *    Earthen Levee   GPS Latitude   Start    Erosion / Bank Caving   37.938461 °    -121.341626 °    DWR_RD0524_01_s _ 2014_180		

E2 : Schedule repair of erosion site prior to the next inspection.

## Inspector Comment

Erosion is located along the lower level of waterward slope.

LM Start	0.34	Rating **	М	Issue No.	180 (cont)
LM End	0.34	Issue Type +	Ма	Location *	WS

#### Photo 1 of 2 : FA\_2016\_RD0524\_107\_180\_20160929\_00227.jpg



Looking southeast at erosion on waterward toe.

Photo 2 of 2: FA\_2016\_RD0524\_107\_180\_20160929\_00228.jpg



Looking northeast at erosion on waterward toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.40	Rating **	U	Issue No.		16	
LM End	0.40	Issue Type +	Ма	Location *	WS		
Supplemental Supplemental				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR Erosion Survey			37.938870°		37.938870°	
пеш	item				60°	-121.340460 °	
DWR ID							
Comment Code							

#### Inspector Comment

07/25/2016: More vegetation observed at the site. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: No significant change at this site.
08/07/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation.
[2016 Site ID:RD0524U01RM40.99]

LM Start	0.40	Rating **	U	Issue No.	16 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS



Front view of the site.

#### Photo 2 of 2: SJR2016\_RD0524U01RM40.99\_4.jpg



Close view of the erosion.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.40	Rating **	U	Issue No.		205	
LM End	0.46	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		37.9386	25°	37.938695°	
пеш				-121.340479°		-121.339420°	
DWR ID DWR_RD0524_01_s _ 2016_205							
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comm	nent			
Several da	mage site	within this rea	ach.				

LM Start	0.40	Rating **	U	Issue No.	205 (cont)
LM End	0.46	Issue Type +	Ma	Location *	LS



Looking at slope damage on landward slope.

Photo 2 of 2: FA\_2016\_RD0524\_107\_205\_20160929\_00247.jpg



Looking at slope damage on landward slope.

LM Start	0.41	Rating **	U	Issue No.		170	
LM End	0.45	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		37.9386	28°	37.938688°	
item				-121.340385 °		-121.339627°	
DWR ID DWR_RD0524_01_s _ 2015_170							
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comm	nent			
Several slope instabilites within this reach.							



Looking at slope damage on waterward shoulder (Spring 2016)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.41	Rating **	U	Issue No.	170 (cont)		
LM End	0.45	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		37.9386	28°	37.938688°	
пеш	-121.340385 ° -					-121.339627°	
DWR ID DWR_RD0524_01_s _ 2015_170							
		Comn	nent Cod	le			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comm	ent			
Several slo	ope instabi	lites within thi	s reach.				

Ма

Issue No.

Location \*

170 (cont)

WS



Looking at slope damage on waterward shoulder.

Photo 3 of 3: FA\_2016\_RD0524\_107\_170\_20160929\_00212.jpg



Looking at waterward slope erosion.

LM Start	0.62	Rating **	U	Issue No.		11
LM End	0.63	Issue Type +	Ма	Location *		WS
Category Earthen Levee			GPS La	atitud	le/Longitude	
Calegory	ory			Start		End
Item	Vegetation			37.938278°		37.938247°
item				-121.336524°		-121.336503 °
DWR ID	DWR_RD0	524_01_s _ 201	12_11			
		Comn	nent Cod	de		
V2 : Remove the wild growth other than native grasses from the levee slopes.						
			_			

Inspector Comment

Bamboo on waterward slope. Bamboo has been killed but still blocking

view of waterward slope.

0.41

0.45

LM Start

LM End

Rating \*\*

Issue Type +



Looking at bamboo on waterward slope. (Spring 2016)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.62	Rating **	U	Issue No.		11 (cont)
LM End	0.63	Issue Type + Ma		Location *		WS
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory				Start		End
Item	Vegetation			37.9382	78°	37.938247 °
пеш				-121.33652	24°	-121.336503 °
DWR ID DWR_RD0524_01_s _ 2012_11						

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Bamboo on waterward slope. Bamboo has been killed but still blocking view of waterward slope.

LM Start	0.62	Rating **	U	Issue No.	11 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS



Looking at bamboo on waterside slope. (Fall 2015)

#### Photo 3 of 5: FA\_2016\_RD0524\_107\_11\_20160929\_00020.jpg



Looking at dying bamboo on waterward slope. (Spring 2013)

LM Start	0.62	Rating **	U	Issue No.	11 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS



Looking at bamboo on waterside slope. (Spring 2012)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.62	Rating **	U	Issue No.	11 (cont)		
LM End	0.63	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		37.938278°		37.938247	
пеш				-121.336524°		-121.336503	
DWR ID DWR_RD0524_01_s _ 2012_11							
Comment Code							

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Bamboo on waterward slope. Bamboo has been killed but still blocking view of waterward slope.



Looking at bamboo on waterside slope. (Fall Inspection 2012)

LM Start	0.63	Rating **	U	Issue No.		10	
LM End	0.63	Issue Type +	Ма	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End		
Item	Erosion / Bank Caving			37.938247°		37.938247°	
пеш				-121.336503 °		-121.336503 °	
DWR ID	DWR_RD0	524_01_f _ 201	5_10				
		Comn	nent Coo	le			
E2 : Schedule repair of erosion site prior to the next inspection.							
·							

# Inspector Comment Erosion located next to and under bamboo.

LM Start	0.63	Rating **	U	Issue No.	10 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS

## Photo 1 of 3 : FA\_2016\_RD0524\_107\_10\_20160929\_00015.jpg



Looking east at waterside erosion appears to be caused by runoff.

Photo 2 of 3: FA\_2016\_RD0524\_107\_10\_20160929\_00016.jpg



## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.63	Rating **	U	Issue No.		10 (cont)		
LM End	0.63	Issue Type +	Ма	Location *		WS		
Category	Earthen L	evee		GPS La	atituc	le/Longitude		
Calegory				Start		End		
Item	Erosion /	Bank Caving		37.9382	47°	37.938247°		
пеш				-121.3365	03°	-121.336503 °		
DWR ID DWR_RD0524_01_f _ 2015_10								
Comment Code								
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.		
		Inspecto	or Comm	nent				
Erosion located next to and under bamboo.								



Looking east at erosion under bamboo on waterward slope.

LM Start	0.64	Rating **	М	Issue No.	13		
LM End	0.65	Issue Type +	Ма	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Sta	oility		37.9381	05°	37.938023°	
пеш				-121.336288 °		-121.336173°	
DWR ID DWR_RD0524_01_s _ 2012_13							
Comment Code							

S1: Repair slope instability.

#### Inspector Comment

Depression extend from shoulder to mid levee slope two site with this section.

LM Start	0.64	Rating **	М	Issue No.	13 (cont)
LM End	0.65	Issue Type +	Ma	Location *	WS

## Photo 1 of 4: FA\_2016\_RD0524\_107\_13\_20160929\_00024.jpg



Looking southeast at depression on waterward shoulde fall 2015



Looking south at erosion on waterside shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.64	Rating **	М	Issue No.		13 (cont)			
LM End	0.65	Issue Type +	Ma	Location *		WS			
Catagory	Earthen Levee				GPS Latitude/Longitude				
Calegory	Category			Start		End			
ltom	Slope Sta	bility		37.9381	05 °	37.938023			
ltem '			-121.3362	88 °	-121.336173				
DWR ID DWR_RD0524_01_s _ 2012_13									
Comment Code									

S1 : Repair slope instability.

Inspector Comment

Depression extend from shoulder to mid levee slope two site with this section.

LM Start	0.64	Rating **	М	Issue No.	13 (cont)
LM End	0.65	Issue Type +	Ma	Location *	WS



View of the erosion.

Photo 4 of 4: FA\_2016\_RD0524\_107\_13\_20160929\_00027.jpg



Update view of the erosion site.

LM Start	0.67	Rating **	U	Issue No.		14	
LM End	0.67	Issue Type +	Ма	Location *		WS	
Category	Cotogon Earthen Levee				GPS Latitude/Longitude		
Calegory	tegory			Start		End	
ltom	Vegetatio	n		37.9378	08°	37.937808°	
пеш	Item			-121.3359	13°	-121.335913°	
DWR ID DWR_RD0524_01_s _ 2012_14					·		
Comment Code							

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Bamboo on waterward slope.Bamboo has been killed but still blocking view of levee slope.

#### Photo 1 of 3: FA\_2016\_RD0524\_107\_14\_20160929\_00028.jpg



Looking south at dying bamboo on waterward slope. Fall 2015

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.67	Rating **	U	Issue No.		14 (cont)		
LM End	0.67	Issue Type +	Ma	Location *	WS			
Catagoni Earthen Levee				GPS Latitude/Longitude				
Calegory	Category			Start		End		
ltom	Vegetatio	n		37.9378	08°	37.937808°		
Item				-121.335913 °		-121.335913°		
DWR ID DWR_RD0524_01_s _ 2012_14								

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Bamboo on waterward slope.Bamboo has been killed but still blocking view of levee slope.

LM Start	0.67	Rating **	U	Issue No.	14 (cont)
LM End	0.67	Issue Type +	Ma	Location *	WS



Looking south at dying bamboo on waterward slope. (Spring 2013)

Photo 3 of 3: FA\_2016\_RD0524\_107\_14\_20160929\_00030.jpg



Looking south at bamboo on waterside slope. (Fall 2012)

LM Start	0.71	Rating **	М	Issue No.		17		
LM End	0.73	Issue Type +	Ма	Location *		WS		
Category	Supplemental			GPS La	titud	le/Longitude		
Calegory				Start		End		
Item	DWR Ero	DWR Erosion Survey			22°	37.937222°		
пеш				-121.335277 °		-121.335277 °		
DWR ID								
		Comn	nent Cod	de				

#### Inspector Comment

07/25/2016: No significant change observed.

06/24/2015: The erosion site is immediately downstream of the RR

bridge. [2016 Site ID:RD0524U01RM41.36]



Close view of the erosion.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.76	Rating **	U	Issue No.		21
LM End	0.77	Issue Type +	Ма	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
ltom	DWR Ero	sion Survey		37.9368	21 °	37.936821 °
Item		-121.3345	82 °	-121.334582°		
DWR ID						

#### Inspector Comment

Comment Code

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line blocks the view of erosion. [2016 Site ID:RD0524U01RM41.39]

LM Start	0.76	Rating **	U	Issue No.	21 (cont)
LM End	0.77	Issue Type +	Ма	Location *	WS



Front view of the erosion site.

#### Photo 2 of 2: SJR2016\_RD0524U01RM41.39\_4.jpg



Front view of the erosion.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.77	Rating **	U	Issue No.	262		
LM End	0.77	Issue Type +	Ma	Location *	LS		
Earthen Levee				GPS La	atitud	e/Longitude	
Calegory	Category			Start		End	
Item	Vegetation			37.9365	55 °	37.936555°	
item				-121.3348	47°	-121.334847°	
DWR ID	DWR_RD0	524_01_s _ 201	2_262				
		Comn	nent Coo	le			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
Inspector Comment							

 LM Start
 0.77
 Rating \*\*
 U
 Issue No.
 262 (cont)

 LM End
 0.77
 Issue Type +
 Ma
 Location \*
 LS

Dense vegetation at landside toe along fence line.



Looking west at dense vegetation at landward slope and toe fall 2015.

Photo 2 of 3 : FA\_2016\_RD0524\_107\_262\_20160929\_00265.jpg



Looking west at dense vegetation on landside toe. Spring 2014

LM Start	0.77	Rating **	U	Issue No.	262 (cont)
LM End	0.77	Issue Type +	Ma	Location *	LS



Looking southwest at vegetation on landward slope and toe. (Spring 2013)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.		76			
LM End	0.78	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS L	atitud	e/Longitude			
Category				Start		End			
Trim / Thin Trees				37.9364	144°	37.936444°			
пеш				-121.334797 °		-121.334797°			
DWR ID DWR_RD0524_01_s _ 2012_76									
		Comn	nent Cod	de					
T1: Trim t	rees to at I	east five feet	above g	round level					
	Inspector Comment								



Looking southwest at low hanging tree branches at landside toe.

LM Start	0.81	Rating **	U	Issue No.		2	
LM End	0.81	Issue Type +	Ма	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Erosion /	Bank Caving		37.9360	93°	37.936004°	
item				-121.334648 °		-121.334615°	
DWR ID DWR_RD0524_01_f _ 2013_2							
		Cama	ant Car	ام			

#### Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ma	Location *	LS

#### Photo 1 of 6: FA\_2016\_RD0524\_107\_2\_20160929\_00001.jpg



Looking west at large hole on landward shoulder (Spring 2016)

Photo 2 of 6: FA\_2016\_RD0524\_107\_2\_20160929\_00002.jpg



Looking southwest at hole on landward shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.81	Rating **	U	Issue No.		2 (cont)		
LM End	0.81	Issue Type +	Ma	Location *	LS			
Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Erosion /	Bank Caving		37.9360	93 °	37.936004°		
пеш			-121.3346	48 °	-121.334615 °			
DWR ID	VR ID DWR_RD0524_01_f _ 2013_2							
Comment Code								

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ма	Location *	LS



Looking west at hole on landward shoulder.

Photo 4 of 6: FA\_2016\_RD0524\_107\_2\_20160929\_00004.jpg



Looking southeast at finger erosion on landward slope.

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ma	Location *	LS



Looking east at erosion on landward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.81	Rating **	U	Issue No.		2 (cont)
LM End	0.81	Issue Type +	Ма	Location *		LS
Catagoni Earthen Levee			GPS Latitude/Longitude			
Category				Start		End
ltom	Erosion /	Bank Caving		37.93609	93 °	37.936004°
пеш	Item			-121.33464	18 °	-121.334615°
DWR ID	DWR_RD0	524_01_f _ 201	3_2			
Comment Code						

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.



Looking northeast at several finger erosion on landward slope.

LM Start	0.83	Rating **	U	Issue No.		22
LM End	0.84	Issue Type +	Ma	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR Ero	sion Survey		37.9359	30°	37.935930°
пеш		-		-121.3341	33°	-121.334133 °
DWR ID						

#### Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: No significant charge observed.

08/13/2013: Site was discovered during boat survey. The dense vegetation blocks a clear view of the erosion. Size of erosion site was very roughly estimated. [2016 Site ID:RD0524U01RM41.44]

#### Photo 1 of 2: SJR2016\_RD0524U01RM41.44\_2.jpg



Close view of the erosion site.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.83	Rating **	U	Issue No.	22 (cont)		
LM End	0.84	Issue Type +	Ма	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.9359	30°	37.935930°	
пеш				-121.3341	33 °	-121.334133 °	
DWR ID							
	Comment Code						

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: Site was discovered during boat survey. The dense vegetation blocks a clear view of the erosion. Size of erosion site was very roughly estimated. [2016 Site ID:RD0524U01RM41.44]



Front view of the erosion.

LM Start	0.91	Rating **	U	Issue No.		33	
LM End	0.91	Issue Type +	Ма	Location *		WS	
Category	Catagon Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR Ero	Erosion Survey		37.9355	76°	37.935576°	
item		•		-121.33320	)2 °	-121.333202°	
DWR ID							

#### Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The erosion site is immediately downstream of the riprap protection. [2016 Site ID:RD0524U01RM41.5]

# Photo 1 of 2 : SJR2016\_RD0524U01RM41.5\_1.jpg



Front view of the erosion. Note the riprap protection near the site.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.91	Rating **	U	Issue No.		33 (cont)	
LM End	0.91	Issue Type +	Issue Type + Ma Lo			WS	
Category Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR Ero	sion Survey		37.9355	76°	37.935576	0
item			-121.3332	02°	-121.333202	0	
DWR ID							

### Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The erosion site is immediately downstream of the riprap protection. [2016 Site ID:RD0524U01RM41.5]



Close view of the erosion.

LM Start	0.93	Rating **	U	Issue No.	77	
LM End	1.01	Issue Type +	Ма	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory						End
Item	Trim / Thi	n Trees		37.9352	59°	37.935049°
пеш				-121.33286	64 °	-121.331334°
DWR ID DWR_RD0524_01_s _ 2012_77						
Comment Code						

T1 : Trim trees to at least five feet above ground level.

#### Inspector Comment

## Photo 1 of 1 : FA\_2016\_RD0524\_107\_77\_20160929\_00127.jpg



Looking south at low hanging tree branches at landside toe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.96	Rating **	М	Issue No.		20	
LM End	0.96	Issue Type +	Ma	Location *		WS	
Cotogony	Earthen L	evee		GPS La	titud	le/Longitude	
Category				Start		End	
Item	Trim / Thi	n Trees		37.9351	81 °	37.935181 °	
item	item			-121.3322	97 °	-121.332297 °	
DWR ID DWR_RD0524_01_f _ 2013_20							
		Comn	nent Cod	de			
T4 : Trim t	rees over i	oadway to at	least 12	feet above	gro	und level.	
		lasasst	0				
		inspecto	or Comm	ient			

No Photos

LM Start	1.00	Rating **	U	Issue No.		47	
LM End	1.00	Issue Type +	Ма	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Category			Start		End		
Item	DWR Ero	sion Survey		37.9354	10°	37.935410°	
item			-121.3315	60°	-121.331560°		
DWR ID							
0							

### Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The erosion was discovered during the boat survey. [2016

Site ID:RD0524U01RM41.58]



Front view of the erosion.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.00	Rating **	U	Issue No.		47 (cont)	
LM End	1.00	Issue Type +	Ma	Location *	WS		
Category Supplemental			GPS Latitude/Longitude				
			Start		End		
DWR Erosion Survey			37.9354	10°	37.935410°		
пеш				-121.3315	60°	-121.331560°	
DWR ID							
	Comment Code						

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The erosion was discovered during the boat survey. [2016

Site ID:RD0524U01RM41.58]



Close view of the erosion.

LM Start	1.02	Rating **	U	Issue No.		55
LM End	1.02	Issue Type +	Ма	Location *		WS
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR Erosion Survey			37.9350	78°	37.935078°
пеш					34 °	-121.331134°
DWR ID						

## Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site.

08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away. [2016 Site ID:RD0524U01RM41.59]

#### Photo 1 of 3: SJR2016\_RD0524U01RM41.59\_1.jpg



Upstream view of the site.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.		55 (cont)	
LM End	1.02	Issue Type +	Ma	Location *		WS	
Category Supplemental			GPS La	atitud	le/Longitude		
			Start		End		
Item	. DWR Erosion Survey			37.9350	78°	37.935078°	
item				-121.3311	34°	-121.331134°	
DWR ID							

#### Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site.

08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away. [2016 Site ID:RD0524U01RM41.59]

LM Start	1.02	Rating **	U	Issue No.	55 (cont)
LM End	1.02	Issue Type +	Ma	Location *	WS

## Photo 2 of 3 : SJR2016\_RD0524U01RM41.59\_2.jpg



Close view of the erosion.

#### Photo 3 of 3: SJR2016\_RD0524U01RM41.59\_4.jpg



Front view of the erosion.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.08	Rating **	U	Issue No.		18
LM End	1.08	Issue Type +	Ма	Location *		LS
Category	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End
Item	Slope Sta	bility		37.9346	45°	37.934645°
пеш				-121.3303	10°	-121.330310 °
DWR ID DWR_RD0524_01_s _ 2012_18						
Comment Code						
S1 : Repai	r slope ins	tability.				
		Inspecto	or Comm	nent		
Slope damage extend from shoulder to middle of slope.						

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	V.2.	
9.7	<b>本語</b>	1 7
		*

Photo 1 of 7: FA\_2016\_RD0524\_107\_18\_20160929\_00037.jpg

Looking south at caving on landward shoulder. (Fall 2015)

 LM Start
 1.08
 Rating \*\*
 U
 Issue No.
 18 (cont)

 LM End
 1.08
 Issue Type +
 Ma
 Location \*
 LS

Photo 2 of 7: FA\_2016\_RD0524\_107\_18\_20160929\_00038.jpg



Landward slope damage. Spring 2014

LM Start	1.08	Rating **	U	Issue No.	18 (cont)
LM End	1.08	Issue Type +	Ma	Location *	LS



Looking south at caving on landward shoulder. (Spring 2015)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.08	Rating **	U	Issue No.	18 (cont)			
LM End	1.08	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory	n y			Start		End		
Item	Slope Sta	bility		37.9346	45°	37.934645°		
пеш				-121.330310 °		-121.330310°		
DWR ID DWR_RD0524_01_s _ 2012_18								
	Comment Code							
S1 : Repai	r slope ins	tability.						
		Inspecto	or Comm	nent				
Slope damage extend from shoulder to middle of slope.								

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A CONTRACT OF THE PARTY OF THE	SALL PROPERTY.
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Photo 4 of 7: FA\_2016\_RD0524\_107\_18\_20160929\_00040.jpg

Updated picture of the erosion site on the landside shoulder.Fall 2014

 LM Start
 1.08
 Rating \*\*
 U
 Issue No.
 18 (cont)

 LM End
 1.08
 Issue Type +
 Ma
 Location \*
 LS

Photo 5 of 7: FA\_2016\_RD0524\_107\_18\_20160929\_00041.jpg



Looking south at caving on landside shoulder. (Sping 2013)

LM Start	1.08	Rating **	U	Issue No.	18 (cont)
LM End	1.08	Issue Type +	Ma	Location *	LS



Looking at updated slope stability as of Fall 2013.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.08	Rating **	U	Issue No.		18 (cont)		
LM End	1.08	Issue Type +	Ма	Location *		LS		
Catagony	Earthen Levee			GPS La	atitud	e/Longitude		
Category			Start		End			
Item	Slope Sta	Slope Stability			45°	37.934645°		
item				-121.330310 °		-121.330310		
DWR ID DWR_RD0524_01_s _ 2012_18								
		Comn	nent Cod	de				
S1 : Repai	r slope ins	tability.						
		Inspecto	or Comm	nent				
Slope damage extend from shoulder to middle of slope.								



Updated view from above the slope stability.

LM Start	1.12	Rating **	М	Issue No.		171	
LM End	1.16	Issue Type +	Ma	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Encroachments			37.934225°		37.933815°	
пеш				-121.329693 °		-121.329242 °	
DWR ID	DWR ID DWR_RD0524_01_s _ 2015_171						
Comment Code							
PR : Prunings							

Inspector Comment

Prunings left on waterward shoulder and slope.



Looking south at prunings on waterward shoulders.

LM Start	1.13	Rating **	С	Issue No.	175			
LM End	1.13	Issue Type +	Ma	Location *	WS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item				37.93417	1°	37.934171	0	
item				-121.329584°		4° -121.329584		
DWR ID								
	Comment Code							

T4: Trim trees over roadway to at least 12 feet above ground level.

Inspector Comment

No Photos

* Location		** Ra
LS : Land Side	N/A : Not Applicable	Α
WS : Water Side		M

: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.13	Rating **	М	Issue No.		19	
LM End	1.16	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory		Start		End			
Item	Trim / Thi	Trim / Thin Trees			18 °	37.933775°	
пеш	item				57°	° -121.329305	
DWR ID DWR_RD0524_01_s _ 2012_19							
		Comn	nent Cod	de			
T1 : Trim trees to at least five feet above ground level.							
Inspector Comment							



Looking southeast at low hanging tree branches at waterside toe.

LM Start	1.15	Rating **	U	Issue No.		60	
LM End	1.23	Issue Type +	Ма	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
DWR Erosion Survey				37.9333	47°	37.933347°	
item				-121.3291	10°	-121.329110°	
DWR ID							

# Comment Code Inspector Comment

07/25/2016: No significant change observed.

06/24/2015: No significant change observed.

06/19/2014: No significant change observed.

08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank. 9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.

10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2016 Site ID:RD0524U01RM41.79]

#### Photo 1 of 3: SJR2016\_RD0524U01RM41.79\_2.jpg



Direct view of the site.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.15	Rating **	U	Issue No.		60 (cont)	
LM End	1.23	Issue Type +	Ma	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR Erosion Survey			37.933347°		37.933347 °	
item				-121.3291	10°	-121.329110 °	
DWR ID						·	

## Inspector Comment

Comment Code

07/25/2016: No significant change observed. 06/24/2015: No significant change observed.

06/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank. 9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.

10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2016 Site ID:RD0524U01RM41.79]

LM Start	1.15	Rating **	U	Issue No.	60 (cont)	
LM End	1.23	Issue Type +	Ma	Location *	WS	



Close view of the erosion.

Photo 3 of 3: SJR2016\_RD0524U01RM41.79\_4.jpg



Close view of the site. Note the tree near the erosion site.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.16	Rating **	U	Issue No.		915	
LM End	1.23	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory			Start		End		
Item	Vegetatio	n		37.9337	75°	37.932784°	
пеш				-121.3292	50°	-121.328765 °	
DWR ID DWR_RD0524_01_s _ 2012_915							
		Comn	nent Cod	de			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
		Inspecto	or Comm	nent			
Control veg at landward toe and berm.							

Photo 1 of 4 : FA_2016_RD0524_107_915_20161013_00387.jpg

Looking southwest at dense veg at landward toe and berm. (Fall 2016)

 LM Start
 1.16
 Rating \*\*
 U
 Issue No.
 915 (cont)

 LM End
 1.23
 Issue Type +
 Ma
 Location \*
 LS

Photo 2 of 4: FA\_2016\_RD0524\_107\_915\_20160929\_00274.jpg



Looking northwest at dense veg at landward toe and berm. (Spirng 2016)

LM Start	1.16	Rating **	U	Issue No.	915 (cont)
LM End	1.23	Issue Type +	Ma	Location *	LS



Looking southwest at dense veg at landward toe and berm. (Spring 2015)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.16	Rating **	U	Issue No.		915 (cont)		
LM End	1.23	Issue Type +	Ма	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
			Start		End			
Vegetation Item			37.933775°		37.932784°			
itein				-121.329250 °		-121.328765 °		
DWR ID DWR_RD0524_01_s _ 2012_915								
Comment Code								
V2 : Remo	V2 : Remove the wild growth other than native grasses from the levee							

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Control veg at landward toe and berm.



Looking southwest at dense veg. on landside toe. (Fall 2015)

	4.47	Dating **		Issue No.		222		
LM Start	1.17	Rating **	U	issue ivo.		206		
LM End	1.17	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.9335	91°	37.933591 °		
пеш						-121.329154°		
DWR ID DWR_RD0524_01_s _ 2016_206								
		Comn	nent Cod	de				
T1 : Trim t	rees to at	east five feet	above g	round level				
		Inspecto	or Comm	nent				



Looking southwest a untrimmed tree at landward toe. (Spring 2016)

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.29	Rating **	U	Issue No.		71	
LM End	1.32	Issue Type +	Ma	Location *	WS		
Category	Supplemental GPS Latitude/Longitu				e/Longitude		
Calegory	Calegory			Start		End	
Item	DWR Erosion Survey			37.9318	58°	37.931858°	
item				-121.3283	00°	-121.328300 °	
DWR ID							
Comment Code							

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: New signs of animal activity were found.

08/07/2012: The site was first reported in 2012 spring levee inspection

report. [2016 Site ID:RD0524U01RM41.92]

LM Start	1.29	Rating **	U	Issue No.	71 (cont)
LM End	1.32	Issue Type +	Ma	Location *	WS



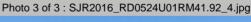
Front view of the erosion.

#### Photo 2 of 3: SJR2016\_RD0524U01RM41.92\_3.jpg



Front view of the erosion.

LM Start	1.29	Rating **	U	Issue No.	71 (cont)
LM End	1.32	Issue Type +	Ma	Location *	WS





Front view of the erosion. Note the drainage pipe on the site.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

-								
LM Start	1.32	Rating **	М	Issue No.		130		
LM End	1.36	Issue Type +	Ma	Location *		CR		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Crown Su	ssions /	37.9316	58°	37.931085°			
пеш	Rutting			-121.3282	255°	-121.328112 °		
DWR ID	DWR_RD0	524_01_s _ 201	13_130					
		Comn	nent Cod	de				
C3 : Add a	appropriate	gravel or roa	d base.	Grade and	com	pact.		
			_					
		Inspect	or Comm	nent				

No Photos

LM Start	1.36	Rating **	U	Issue No.		172	
LM End	1.40	Issue Type +	Ма	Location *		CR	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item		rface / Depres	ssions /	37.9310	85°	37.930517°	
item	Rutting			-121.3281	12°	-121.328072 °	
DWR ID	DWR_RD0	524_01_s _ 201	5_172				
Comment Code							
C2 · Repai	r depressi	ons or ruts in	the crow	n or slone			

C2 : Repair depressions or ruts in the crown or slope.

#### Inspector Comment

Levee crown depression several inches below original crown elevation. Section should be survey to determine proper elevation.

LM Start	1.36	Rating **	U	Issue No.	172 (cont)
LM End	1.40	Issue Type +	Ма	Location *	CR

#### Photo 1 of 2: FA\_2016\_RD0524\_107\_172\_20160929\_00214.jpg



Looking east at depression on levee crown.

Photo 2 of 2: FA\_2016\_RD0524\_107\_172\_20160929\_00215.jpg



Looking southeast at depression on levee crown.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

1.39	Rating **	U	Issue No.		79			
1.39	Issue Type +	Ма	Location *		WS			
Suppleme	ental		GPS L	atitud	e/Longitude			
			Start		End			
DWR Eros	sion Survey		37.9305	75°	37.930575°			
Item					-121.328090 °			
DWR ID								
	Comn	nent Cod	de					
	Inspecto	or Comm	nent					
6: No signi	ficant change	observe	d					
5: No signi	ficant change	observe	d.					
4: No signi	ficant change	observe	d.					
08/13/2013: No significant change observed.								
08/07/2012: The site was first reported in 2012 spring levee inspection								
report. The site is located about 750 ft downstream of SR 4 Bridge.								
[2016 Site ID:RD0524U01RM42.03]								
֡	1.39 Suppleme  DWR Ero  6: No signi 5: No signi 4: No signi 3: No signi 2: The site	1.39 Issue Type + Supplemental  DWR Erosion Survey  Comn  Inspecte S: No significant change S: No significant change 4: No significant change 3: No significant change 4: No significant change 5: No significant change 6: No significant change	1.39 Issue Type + Ma  Supplemental  DWR Erosion Survey  Comment Cod  Inspector Comment Cod  So No significant change observed: No significant change observed: No significant change observed: No significant change observed: The site was first reported in 2 to site is located about 750 ft dow	1.39 Issue Type + Ma Location *  Supplemental GPS L  Start  DWR Erosion Survey 37.9305  -121.3280  Comment Code  Inspector Comment  S: No significant change observed  5: No significant change observed.  4: No significant change observed.  3: No significant change observed.  2: The site was first reported in 2012 spring a site is located about 750 ft downstream of	1.39 Issue Type + Ma Location *  Supplemental GPS Latitud Start  DWR Erosion Survey 37.930575 ° -121.328090 °  Comment Code  Inspector Comment 5: No significant change observed 5: No significant change observed. 4: No significant change observed. 3: No significant change observed. 2: The site was first reported in 2012 spring level as site is located about 750 ft downstream of SR			

LM Start	1.39	Rating **	U	Issue No.	79 (cont)
LM End	1.39	Issue Type +	Ma	Location *	WS



Front view of the erosion.



Close view of the erosion.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.39	Rating **	U	Issue No.		79 (cont)	
LM End	1.39	Issue Type +	Ma	Location *	WS		
Category	ental	GPS Latitude/Longitude					
Calegory	Jalegory					End	
Item	DWR Ero	sion Survey		37.9305	75°	37.930575°	
пеш				-121.3280	90°	-121.328090 °	
DWR ID	OWR ID						
Comment Code							

#### Inspector Comment

07/25/2016: No significant change observed 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection report. The site is located about 750 ft downstream of SR 4 Bridge. [2016 Site ID:RD0524U01RM42.03]



Close view of the erosion.

LM Start	1.45	Rating ** U		Issue No.		89		
LM End	1.47	Issue Type + Ma		Location *		WS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR Ero	sion Survey		37.9296	50°	37.929650°		
item				-121.3281	10°	-121.328110 °		
DWR ID								

# Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: The site is located approximately 400 ft. downstream SR 4

Bridge. Dense vegetation is visible at the toe. [2016 Site

ID:RD0524U01RM42.09]

#### Photo 1 of 2: SJR2016\_RD0524U01RM42.09\_3.jpg



Close view of the erosion. Note the vegetation at the site.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.45	Rating **	U	Issue No.	ssue No. 89 (cont)			
LM End	1.47	Issue Type +	Ma	Location *		WS		
Category Supplemental				GPS Latitude/Longitude				
Calegory		Start		End				
Item	DWR Ero	sion Survey		37.9296	50°	37.929650°		
пеш				-121.3281	10°	-121.328110°		
DWR ID	₹ ID							
Comment Code								

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: The site is located approximately 400 ft. downstream SR 4

Bridge. Dense vegetation is visible at the toe. [2016 Site

ID:RD0524U01RM42.09]



Close view of the erosion.

LM Start	1.49	Rating **	U	Issue No.	916		
LM End	1.49	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Trim / Thi	n Trees		37.9291	18°	37.929118°	
item				-121.3283	68°	-121.328368°	
DWR ID DWR_RD0524_01_s _ 2012_916							
		_	_				

#### Comment Code

T3: Trim and thin trees to allow visibility of the ground and room to flood fight.

#### Inspector Comment

Untrimmed trees and dense vegetation on landward toe.

# Photo 1 of 4 : FA\_2016\_RD0524\_107\_916\_20160929\_00277.jpg



Looking at dense trees on landward slope and toe fall 2015

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.49	Rating **	U	Issue No.		916 (cont)	
LM End	1.49	Issue Type +	Ma	Location *		LS	
Cotogon/ Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Trim / Thin Trees					37.929118°	
пеш				-121.3283	-121.328368 °		
DWR ID DWR_RD0524_01_s _ 2012_916							
		Comn	nent Cod	de			
T3 : Trim a flood fight.		es to allow vis	sibility of	the ground	and	d room to	
		Inspecto	or Comm	nent			
Untrimmed	trees and	dense veget	ation on	landward to	oe.		

hoto 2 of 4:	: FA_2016 <sub>-</sub>	_RD0524_	_107_9 <sup>-</sup>	16_2016	0929_0	)0278.j	l
3 de 1				and the state of t	The second		
41							
A. C. C.		O. T.					
		1		45.1			

Looking at trees on landside slope. (Fall 2012)

LM Start	1.49	Rating **	U	Issue No.	916 (cont)
LM End	1.49	Issue Type +	Ma	Location *	LS



Looking at dense veg. on landside slope and toe.

LM Start	1.49	Rating **	U	Issue No.	916 (cont)
LM End	1.49	Issue Type +	Ma	Location *	LS



Dense vegetation on landside toe.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.55	Rating **	U	Issue No.	23	
LM End	1.59	Issue Type +	Ma	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Calegory			Start End			
Item	Vegetatio	n		37.9283	88°	37.927797°
item		-121.328280 ° -121.3				
DWR ID DWR_RD0524_01_s _ 2012_23						·
Comment Code						

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Dense vegetation on landward slope.



Looking southwest at dense veg on landward slope. (Fall 2016)

LM Start	1.55	Rating **	U	Issue No.	202	
LM End	1.55	Issue Type +	Ma	Location *		WS
Earthen Levee			GPS Latitude/Longitude			
Category				Start		End
Item	Erosion /	Bank Caving		37.9283	72°	37.928372°
пеш				-121.3282	83°	-121.328283°
DWR ID DWR_RD0524_01_f _ 2016_202						
Comment Code						

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Large hole (looks like fences post or telephone pole) on waterward shoulder.

LM Start	1.55	Rating **	U	Issue No.	202 (cont)
LM End	1.55	Issue Type +	Ма	Location *	WS

#### Photo 1 of 2: FA\_2016\_RD0524\_107\_202\_20161013\_00389.jpg



Looking at large hole (Fence/telephone post hole) on waterward shoulder.

Photo 2 of 2: FA\_2016\_RD0524\_107\_202\_20161013\_00390.jpg



Looking at hole on waterward shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.56	Rating **	U	Issue No.		90	
LM End	1.62	Issue Type +	Ma	Location *		WS	
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.9277	70°	37.927770°	
пеш				-121.3278	70°	-121.327870°	
DWR ID							

# Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed.

06/19/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site. Trees concerned still in place.

09/07/2010: No significant change observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection. 09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2016 Site ID:RD0524U01RM42.2]

LM Start	1.56	Rating **	U	Issue No.	90 (cont)
LM End	1.62	Issue Type +	Ma	Location *	WS



Front view of the site where undermining has occurred.

#### Photo 2 of 3: SJR2016 RD0524U01RM42.2 2.jpg



Close view of the erosion.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.56	Rating **	U	Issue No.		90 (cont)
LM End	1.62	Issue Type +	Ma	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory	y			Start		End
Item	DWR Ero	sion Survey		37.9277	70°	37.927770°
пеш				-121.3278	70°	-121.327870 °
DWR ID						

#### Inspector Comment

Comment Code

07/25/2016: No significant change observed. 06/24/2015: No significant change observed.

06/19/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site. Trees concerned still in place.

09/07/2010: No significant change observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection. 09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; its is immediately unstream of the Highway 4 Bridge; the bridge is

tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2016 Site ID:RD0524U01RM42.2]



Close view of the erosion at the levee toe.

LM Start	1.58	Rating **	U	Issue No.		173
LM End	1.58	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS Latitude/Longitude		
Category				Start		End
Item	Trim / Thi	n Trees		37.9279	75°	37.927975°
пеш			-121.3280	88°	-121.328088 °	
DWR ID DWR_RD0524_01_s _ 2015_173						

#### Comment Code

T1 : Trim trees to at least five feet above ground level.

#### Inspector Comment

Tree is located on landward shoulder and crown should be removed.

#### Photo 1 of 1: FA\_2016\_RD0524\_107\_173\_20160929\_00216.jpg



Looking northwest at tree on within levee crown.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.59	Rating **	М	Issue No.	136	
LM End	1.59	Issue Type +	Ma	Location *	CR	
Category	evee	GPS Latitude/Longitude				
Calegory			Start End			
Item	Slope Sta	bility		37.9277	75°	37.927775°
пеш	-121.327860 ° -121.3278					-121.327860 °
DWR ID DWR_RD0524_01_s _ 2013_136						
Comment Code						

S2: Repair the levee slope damaged by foot traffic and prevent access where possible.

#### Inspector Comment

Waterward shoulder caving



Looking south at depression on levee crown near wateward shoulder.

LM Start	1.60	Rating **	U	Issue No.		24	
LM End	1.61	Issue Type +	Ма	Location *		LS	
Category	Cotogon Earthen Levee			GPS Latitude/Longitude			
Category		Start		End			
Item	Vegetation			37.9276	35°	37.927540°	
item				-121.327812 °		-121.327648°	
DWR ID DWR_RD0524_01_s _ 2012_24							
		_					

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Vegetation blocking landward toe.

# Photo 1 of 1: FA 2016 RD0524 107 24 20161013 00394.jpg



Looking northwest at dense veg on waterward slope.

Photo 1 of 3: FA\_2016\_RD0524\_107\_25\_20161013\_00392.jpg

LM Start	1.60	Rating **	U	Issue No.		25
LM End	1.61	Issue Type +	Ма	Location *		WS
Category	Earthen Levee			GPS Latitude/Longitude		
Category	gory		Start		End	
Item	Vegetation		37.9276	35°	37.927540°	
пеш				-121.3278	12°	-121.327648°
DWR ID	DWR_RD0	524_01_s _ 201	2_25			*

#### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes

#### Inspector Comment



Looking northwest at dense veg on waterward slope.

Location

N/A: Not Applicable LS: Land Side WS: Water Side

: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.60	Rating **	U	Issue No.		25 (cont)
LM End	1.61	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Vegetatio	n		37.9276	35°	37.927540°
item				-121.327812°		-121.327648°
DWR ID DWR_RD0524_01_s _ 2012_25						
		Comn	nent Cod	de		
V2 : Remove the wild growth other than native grasses from the levee slopes.						
		Inspecto	or Comm	nent		

Ма

Issue No.

Location \*

25 (cont)

WS

LM Start

LM End

1.60

1.61

Rating \*\*

Issue Type +

hoto 2 of 3 : FA_2016_I	RD0524_107_25_201	61013_00393.jpg
S NAME OF STREET	and the second second	A Prince

Looking northwest at end of dense veg on waterward slope.

Photo 3 of 3: FA\_2016\_RD0524\_107\_25\_20161013\_00391.jpg



Looking southwest at dense veg on waterward slope.

LM Start	1.62	Rating **	М	Issue No.		26	
LM End	1.64	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Erosion / Bank Caving			37.9275	607°	37.927295°	
item		-121.327593 °		-121.327298°			
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_26						
		Comn	nent Co	de			
E1 : Note a	and monito	or erosion site					
		Inspecto	or Comn	nent			
Several erosions along this reach.							



Looking south at waterward erosion.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.62	Rating **	М	Issue No.		26 (cont)	
LM End	1.64	Issue Type +	Ма	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Erosion / I	Bank Caving		37.9275	07°	37.927295°	
item				-121.3275	93°	-121.327298°	
DWR ID DWR_RD0524_01_s _ 2012_26							
Comment Code							
E1 : Note a	and monito	or erosion site					
		Inspecto	or Comm	nent			
Several erosions along this reach.							

Photo 2 of 3 : FA_2016_F	RD0524_107_26_20160929_00060.jpg
	The state of the s
The state of the s	

Looking east at waterward erosion.

 LM Start
 1.62
 Rating \*\*
 M
 Issue No.
 26 (cont)

 LM End
 1.64
 Issue Type +
 Ma
 Location \*
 WS

Photo 3 of 3: FA\_2016\_RD0524\_107\_26\_20160929\_00061.jpg



Looking east at waterward erosion and depression.

LM Start	1.65	Rating **	N	Issue No.		8	
LM End	1.68	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.9272	55°	37.926855°	
item					37°	-121.326672°	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_8						
		Comn	nent Cod	de			
T5 : Tree s	T5 : Tree stumps.						
	Inspector Comment						
Several tree stumps on waterside shoulder.							

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.67	Rating **	U	Issue No.		45
LM End	1.67	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroachi	ments		37.9270	18°	37.927018°
пеш				-121.326872 °		-121.326872°
DWR ID	DWR_RD0	524_01_s _ 201	2_45			
		Comn	nent Cod	de		
ST : Stairv	vay					
		Inspecto	or Comm	nent		
Stairs and retaining wall						

Photo 1 of 3: FA_2016_RD0524_107_45_20160929_00089.jpg

Looking northeast at non-permitted concrete stairs on waterside slope.

LM Start	1.67	Rating **	U	Issue No.	45 (cont)
LM End	1.67	Issue Type +	Ma	Location *	WS

Photo 2 of 3: FA\_2016\_RD0524\_107\_45\_20160929\_00090.jpg



Looking southwest at retaning wall connected to concrete stairs.

LM S	tart	1.67	Rating **	U	Issue No.	45 (cont)
LM E	nd	1.67	Issue Type +	Ma	Location *	WS



Looking west at concrete stairs on waterside slope.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence

CR: Crown

\*\* Rating

A: Acceptable C: Corrected C: Correcte

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.69	Rating **	М	Issue No.		27
LM End	1.70	Issue Type +	Ma	Location *		WS
Catagory	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Slope Stability			37.9267	28°	37.926730°
item			-121.326597°		-121.326508°	
DWR ID	DWR_RD0524_01_s _ 2012_27					
		Comn	nent Cod	de		
S1 : Repai	ir slope ins	tability.				
Inspector Comment						
Slope damage several feet long and greater than one inch deep.						



Looking south at landward slope drepression.

LM Start	1.75	Rating **	U	Issue No.		46
LM End	1.76	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroachments			37.9261	52°	37.925993°
item			-121.325927 °		-121.325777 °	
DWR ID	DWR_RD0	524_01_s _ 201	2_46			
		Comn	nent Cod	de		
TR : Tree	or limb					
Inspector Comment						
Downed tree limbs on landward slope.						

LM Start	1.75	Rating **	U	Issue No.	46 (cont)
LM End	1.76	Issue Type +	Ma	Location *	LS

# Photo 1 of 4 : FA\_2016\_RD0524\_107\_46\_20160929\_00092.jpg



Looking south at tree limbs on landward slope.

Photo 2 of 4: FA\_2016\_RD0524\_107\_46\_20160929\_00093.jpg



Looking southwest at tree limbs on landward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.75	Rating **	U	Issue No.		46 (cont)	
LM End	1.76	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachi	ments		37.9261	52°	37.925993°	
пеш				-121.325927°		-121.325777°	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_46						
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			
Downed tr	ee limbs o	n landward slo	ре.				
·							

		D 11 ++		1	40.4
LM Start	1.75	Rating **	U	Issue No.	46 (cont)
LM End	1 76	Issue Type +	Ma	Location *	LS



Looking south at tree limbs on landward slope.





Looking southwest at dense vegetation and low hanging tree branches on landside slope and toe.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.94	Rating **	U	Issue No.		176
LM End	1.94	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Erosion / Bank Caving			37.9236	88°	37.923688 °
пеш			-121.324223 °		-121.324223 °	
DWR ID DWR_RD0524_01_s _ 2015_176						
		Comn	nent Cod	de		
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Landward caving (3 x 18" x 5 ) caused by broken sprinklers.						

Photo 1 of 2: FA_2016_RD0524_107_176_20160929_00220.jpg

Looking west at erosion within landscaping on landward shoulder and slope.

LM Start	1.94	Rating **	U	Issue No.	176 (cont)
LM End	1.94	Issue Type +	Ma	Location *	LS



Looking east at erosion within landscaping on landward slope and shoulder.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.02	Rating **	U	Issue No.		6
LM End	2.07	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Vegetation			37.9226	25°	37.922062 °
item				-121.3236	640°	-121.323117°
DWR ID DWR_RD0524_01_f _ 2012_6						
		Comn	nent Cod	de		
V2 : Remove the wild growth other than native grasses from the levee slopes.						
		Inspecto	or Comm	nent		
Dense vegetation on waterward slope.						



Looking southeast at dense veg on waterward slope.

LM Start	2.08	Rating **	С	Issue No.		183	
LM End	2.08	Issue Type +	Ma	Location *	WS		
Catagonia Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Itom	ltem Vegetation			37.9220	09°	37.922009°	
item				-121.3230	15 °	-121.323015°	
DWR ID DWR_RD0524_01_s _ 2014_183							
Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

#### Inspector Comment

Elderberry is outside the twenty foot zone on waterward slope.

No	Pł	not	റട

LM Start	2.15	Rating **	С	Issue No.		30	
LM End	2.16	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Erosion / Bank Caving			37.921383°		37.921300	0
item			-121.322043 °		-121.321902	0	
DWR ID	DWR_RD0	524_01_s _ 201	2_30				
		Comn	nent Coo	de			
E1: Note a	and monito	or erosion site					_
Inspector Comment							

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.19	Rating **	U	Issue No.		91
LM End	2.19	Issue Type +	Ма	Location *		WS
Supplemental			GPS Latitude/Longitude			
Calegory	ategory			Start		End
Itom	DWR Erosion Survey			37.920992°		37.920992°
пеш				-121.321370 °		-121.321370°
DWR ID						
Comment Code						
In a section On the section						

Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 07/22/2014: The erosion has increased in size.

08/13/2013: No significant change observed. Slightly more vegetation was visible.

08/07/2012: The site was first reported in 2012 spring levee inspection report. [2016 Site ID:RD0524U01RM42.79]

LM Start	2.19	Rating **	U	Issue No.	91 (cont)
LM End	2.19	Issue Type +	Ma	Location *	WS



Close view of the pocket erosion.





Front view of the erosion.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.24	Rating **	U	Issue No.		99		
LM End	2.27	Issue Type +	Ma	Location *	WS			
Category	Suppleme	ental		GPS La	atitud	le/Longitude		
Calegory						End		
Item	DWR Ero	sion Survey		37.9206	650°	37.920650°		
пеш				-121.3203	870°	-121.320370°		
DWR ID								
		Comn	nent Cod	le				
		Comn	nent Cod	le				
			nent Coo					
07/25/201	6: No signi		or Comm	nent				
	_	Inspecto	or Comm	nent				
06/24/201	5: No signi	Inspecto	or Commobserve	nent ed.				
06/24/201 06/19/201	5: No signi 4: No sign	Inspector ficant change ficant change	or Commobserve	nent d. d. ed.				

Ма

Issue No.

Location \*

99 (cont)

WS

Rating \*\*

Issue Type +

LM Start

LM End

2.24

2.27



Close view of the erosion.

#### Photo 2 of 3: SJR2016\_RD0524U01RM42.84\_3.jpg



Close view of the erosion.

LM Start	2.24	Rating **	U	Issue No.	99 (cont)
LM End	2.27	Issue Type +	Ma	Location *	WS



Close view of the erosion. Note the irrigation pipe next to the erosion.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: C: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintain Ob: Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.25	Rating **	U	Issue No.	31		
LM End	2.25	Issue Type +	Ma	Location *	WS		
Category	Catagoria Earthen Levee			GPS La	atitud	e/Longitude	
Calegory				Start		End	
Slope Stability			37.920493 °		37.920493°		
пеш			-121.320565 °		5° -121.320565°		
DWR ID	DWR_RD0	524_01_s _ 201	2_31				
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
	Inspector Comment						

LM Start 2.25 Rating \*\* U Issue No. 31 (cont)

Ма

Issue Type +

Location \*

WS

Slope instability probably cause by leak in irrigation pipe. Pipe should

be inspected internally.

LM End

2.25



Looking south at siphon on waterward slope.

Photo 2 of 3: FA\_2016\_RD0524\_107\_31\_20160929\_00066.jpg



Looking east at siphon on waterward slope.

LM Start	2.25	Rating **	U	Issue No.	31 (cont)
LM End	2.25	Issue Type +	Ma	Location *	WS



Looking south slope damage on waterward shoulder and slope.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

\*\* Rating

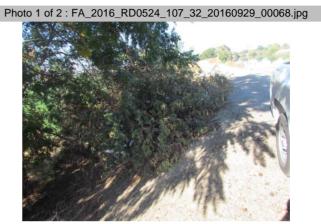
A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.27	Rating **	U	Issue No.		32	
LM End	2.29	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	n		37.9203	72°	37.920167°	
пеш				-121.3202	30°	-121.319890 °	
DWR ID DWR_RD0524_01_s _ 2012_32							
Comment Code							
V4 : Elderl	perries are	blocking visit	oility and	flood fight	capa	ability.	
		Inspecto	or Comm	nent			
Dense eld	erberry bus	shes on landw	ard slop	e and toe.			



Looking northwest at dense veg on landward slope and toe fall 2015.

 LM Start
 2.27
 Rating \*\*
 U
 Issue No.
 32 (cont)

 LM End
 2.29
 Issue Type +
 Ma
 Location \*
 LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_32\_20160929\_00069.jpg



Looking south at dense veg on landside slope and toe.

LM Start	2.27	Rating **	U	Issue No.		203		
LM End	2.27	Issue Type +	Ма	Location *		LS		
Category	Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		37.9203	27°	37.920327°		
item				-121.3201	75°	-121.320175°		
DWR ID DWR_RD0524_01_f _ 2016_203								
Comment Code								
PR : Prunings								
		Inspecto	or Comm	nent				
Large pruning pile on landward slope and toe.								



Looking west at pruning pile on waterward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.31	Rating **	С	Issue No.		103	
LM End	2.33	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.9198	85 °	37.919885	0
пеш				-121.3197	10°	-121.319710	0
DWR ID							

Comment Code

#### Inspector Comment

07/25/2016: No sign of erosion observed at the repaired site.

06/24/2015: No significant change observed.

6/19/2014: The erosion was repaired.

08/13/2013: The length of erosion has progressed downstream, and the site length has increased from 12 ft in length last year to 100 feet in length this year.

08/07/2012: The site was first reported in the 2012 spring levee inspection report. The site is located at the inside corner of a river bend. [2016 Site ID:RD0524U01RM42.93]

LM Start	2.32	Rating **	М	Issue No.		34
LM End	2.33	Issue Type +	Ма	Location *		WS
Category	evee	GPS Latitude/Longitude				
Calegory			Start		End	
Item	Slope Sta	bility		37.9198	85°	37.919703°
пеш				-121.3197	13 °	-121.319702°
DWR ID	DWR_RD0	524_01_s _ 201	2_34			

Comment Code

S2: Repair the levee slope damaged by foot traffic and prevent access where possible.

## Inspector Comment

Slope damage caused by walking traffic and using bank as a fishing platform.

No Photos

#### Photo 1 of 1: FA\_2016\_RD0524\_107\_34\_20160929\_00072.jpg



Looking northeast at damage to the slope possibly caused by human activity.

LS: Land Side WS: Water Side

N/A: Not Applicable

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.33	Rating **	U	Issue No.		107
LM End	2.33	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		37.9197	'42 °	37.919742°
item				-121.3196	23°	-121.319623°
DWR ID DWR_RD0524_01_s _ 2012_107						
		Comn	nent Cod	de		
T1 : Trim t	rees to at	east five feet	above g	round level		
		Inspecto	or Comm	nent		



Looking northwest at untrimmed tress at landward toe.

Photo 1 of 1: FA\_2016\_RD0524\_107\_204\_20161013\_00398.jpg

LM Start	2.38	Rating **	U	Issue No.		204
LM End	2.42	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory			Start		End	
Item	Vegetatio	n		37.9190	67°	37.918713°
ILEIII				-121.3199	35°	-121.320595 °
DWR ID DWR_RD0524_01_f _ 2016_204						
		_				

#### **Comment Code**

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Dense vegetation on landward slope and waterward slope.



Looking south at dense veg on landward slope.

LM St	art	2.38	Rating **	М	Issue No.		184	
LM E	nd	2.38	Issue Type +	Ma	Location *		LS	
Categ	orv	Earthen L	evee		GPS La	atitud	e/Longitude	
Caleg	Ory				Start		End	
Item	1	Trim / Thi	n Trees		37.9190	36°	37.919036	0
пен	•				-121.3199	69°	-121.319969	0
DWR	ID	DWR_RD0	524_01_s _ 201	4_184				
			Comn	nent Coc	le			

T1 : Trim trees to at least five feet above ground level.

#### Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown	II · I Inaccentable	A/W · Accentable but Monitor & Maintain	En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.41	Rating **	U	Issue No.		35
LM End	2.45	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS L	atitude	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		37.9187	'85 °	37.918515°
item				-121.320417 °		-121.321110°
DWR ID	DWR_RD0	524_01_s _ 201	2_35			
		Comn	nent Cod	de		
V4 : Elderl	berries are	blocking visit	ility and	flood fight	capa	bility.
		Inspecto	or Comm	nent		

# Photo 1 of 1: FA\_2016\_RD0524\_107\_35\_20160929\_00073.jpg

Looking southwest at dense vegetation on landward toe.

LM Start	2.44	Rating **	М	Issue No.		36
LM End	2.47	Issue Type +	Ma	Location *		WS
0.1	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Erosion / I	Bank Caving		37.9186	28°	37.918438°
item				-121.320817 °		-121.321452°
DWR ID DWR_RD0524_01_s _ 2012_36						
		Comn	nent Cod	de		
E1 : Note a	and monito	or erosion site				
		Inspecto	or Comm	nent		



Looking east at erosion on waterside slope.

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# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.45	Rating **	U	Issue No.		80
LM End	2.45	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		37.9184	-80°	37.918480°
itein				-121.3211	14 °	-121.321114°
DWR ID DWR_RD0524_01_s _ 2012_80						
		Comn	nent Cod	le		
T1 : Trim t	rees to at	east five feet	above g	round level		
		Inspecto	or Comm	nent		
Untrimmed tree on landward slope.						
·						



Looking south at untrimmed tree on landward slope.

-						
LM Start	2.49	Rating **	U	Issue No.		37
LM End	2.50	Issue Type +	Ма	Location *		LS
Category	Earthen Levee			GPS L	atituc	le/Longitude
Calegory				Start		End
Item	Vegetatio	n		37.918345 ° 37.9		
пеш				-121.3217	-121.321923°	
DWR ID DWR_RD0524_01_s _ 2012_37						
		Comn	nent Cod	de		
V4 : Elderl	berries are	blocking visit	oility and	flood fight	capa	ability.
		Inspecto	or Comm	nent		

LM Start	2.49	Rating **	U	Issue No.	37 (cont)
LM End	2.50	Issue Type +	Ma	Location *	LS

# Photo 1 of 4: FA\_2016\_RD0524\_107\_37\_20160929\_00075.jpg



Looking south at elderberry on landside slope.

Photo 2 of 4: FA\_2016\_RD0524\_107\_37\_20160929\_00076.jpg



Looking southwest at dense vegetation on landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.49	Rating **	U	Issue No.	37 (cont)			
LM End	2.50	Issue Type +	Ма	Location *	LS			
Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Vegetatio	n		37.9183	45°	37.918302°		
пеш				-121.321765 ° -121.321				
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_37							
		Comn	nent Cod	de				
V4 : Elderl	perries are	blocking visib	ility and	flood fight	capa	ability.		
		Inspecto	or Comm	nent				

×			
- State of the last of the las		1	M
Service of the last of the las			

Photo 3 of 4: FA\_2016\_RD0524\_107\_37\_20160929\_00077.jpg

Looking north at elderberry and trees on landside slope.

 LM Start
 2.49
 Rating \*\*
 U
 Issue No.
 37 (cont)

 LM End
 2.50
 Issue Type +
 Ma
 Location \*
 LS

Photo 4 of 4: FA\_2016\_RD0524\_107\_37\_20160929\_00078.jpg



Looking southwest at trees along levee landside toe.

LM Start	2.50	5 11 44				
	2.00	Rating **	U	Issue No.		38
LM End	2.50	Issue Type +	Ма	Location *	n* WS	
Earthen Levee				GPS La	atitud	le/Longitude
Category				Start		End
Item	Vegetation			37.9182	87°	37.918287°
item				-121.321980 ° -121.32		
DWR ID DWR_RD0524_01_s _ 2012_38						
		Comn	nent Cod	de		
V4 : Elderb	erries are	blocking visib	ility and	flood fight of	capa	ability.
		Inspecto	or Comm	nent		



Looking north at elderberry on waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.50	Rating **	U	Issue No.	38 (cont)			
LM End	2.50	Issue Type +	Ma	Location *	WS			
Catagoni	Earthen L	evee		GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetation			37.9182	87°	37.918287°		
пеш				-121.3219	-121.321980°			
DWR ID DWR_RD0524_01_s _ 2012_38								
		Comn	nent Cod	de				
V4 : Elderl	berries are	blocking visit	oility and	flood fight	capa	ability.		
		laan aat						
		Inspecto	or Comm	ient				



Looking south at elderberry on waterside slope.

LM Start	2.53	Rating **	U	Issue No.		40	
LM End	2.57	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee	GPS Latitude/Longitu		e/Longitude		
Calegory				Start		End	
Item	Vegetatio	n		37.9180	47°	37.917498°	
пеш				-121.3224	15°	-121.322797°	
DWR ID	DWR_RD0	524_01_s _ 201	2_40				
Comment Code							
VA . Fldork		blooking vioik	ility and	flood fiabt		hilita r	

V4 : Elderberries are blocking visibility and flood fight capability.

#### Inspector Comment

# Photo 1 of 1 : FA\_2016\_RD0524\_107\_40\_20160929\_00083.jpg



Looking southwest at dense veg on landward slope.

LM Start	2.54	Rating **	U	Issue No.	82	
LM End	2.54	Issue Type +	Ма	Location *	LS	
Category	Earthen Levee			GPS Lat	titud	e/Longitude
Calegory				Start		End
Item	Slope Stability			37.91797	'8°	37.917978°
пеш				-121.32248	3°	-121.322483°
DWR ID DWR_RD0524_01_s _ 2012_82						
		Comp	ant Coo	10		

#### Comment Code

S1: Repair slope instability.

#### Inspector Comment

Landward slope damage from animal digging into levee.

# Photo 1 of 2 : FA\_2016\_RD0524\_107\_82\_20161013\_00400.jpg



Looking southwest at large holes on landward slope. (Fall 2016)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.54	Rating **	U	Issue No.		82 (cont)		
LM End	2.54	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Slope Sta	bility		37.9179	78°	37.917978°		
пеш				-121.3224	83 °	-121.322483°		
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_82							
		Comn	nent Cod	de				
S1 : Repai	ir slope ins	tability.						
		Inspecto	or Comm	nent				
Landward slope damage from animal digging into levee.								



Looking southwest at damaged landward slope. (Spring 2016)

LM Start	2.57	Rating **	U	Issue No.		218	
LM End	2.57	Issue Type +	Ма	Location *		WS	
Catagoni	evee	GPS La	atitud	le/Longitude			
Category				Start		End	
ltom	Item Erosion / Bank Caving				92°	37.917492°	
item					95°	-121.322795°	
DWR ID	DWR_RD0	524_01_f _ 201	6_218			·	
		Comn	nent Cod	de			
E2 : Sched	lule repair	of erosion site	e prior to	the next in	spe	ction.	
Inspector Comment							
Large trend	ch on wate	rward should	er and sl	ope. Trencl	n is 4	45 x 15 x 5.	

LM Start	2.57	Rating **	U	Issue No.	218 (cont)
LM End	2.57	Issue Type +	Ma	Location *	WS

# Photo 1 of 3: FA\_2016\_RD0524\_107\_218\_20161013\_00402.jpg



Looking east at trench on waterward shoulder.

Photo 2 of 3: FA\_2016\_RD0524\_107\_218\_20161013\_00401.jpg



Looking south at trench on waterward shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.57	Rating **	U	Issue No.		218 (cont)		
LM End	2.57	Issue Type +	Ма	Location *		WS		
Category	Earthen Levee				atitud	e/Longitude		
Calegory				Start		End		
Item	Erosion / I	Bank Caving		37.9174	92°	37.917492°		
item	-121.32				95 °	-121.322795°		
DWR ID	DWR ID DWR_RD0524_01_f _ 2016_218							
		Comn	nent Cod	de				
E2 : Sched	lule repair	of erosion site	e prior to	the next in	spe	ction.		
			_					
		Inspecto	or Comm	nent				
Large trench on waterward shoulder and slope. Trench is 45 x 15 x 5.								



Looking northwest at trench on waterward shoulder.

LM Start	2.58	Rating **	М	Issue No.		917
LM End	2.58	Issue Type +	Ма	Location *		LS
Catagony	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Animal Co	ontrol		37.9174	75°	37.917475°
пеш				-121.3228	08°	-121.322808°
DWR ID	DWR_RD0	524_01_s _ 201	2_917		,	
		Cama	ant Car	ام		

#### **Comment Code**

A2 : Repair the levee slope damaged by livestock and prevent large animal access.

#### Inspector Comment

No Photos

LM Start	2.59	Rating **	U	Issue No.		9	
LM End	2.63	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		37.9172	28°	37.916858	0
пеш				-121.3227	30°	-121.322168	0
DWR ID	DWR_RD0	524_01_s _ 201	2_9				

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment



Looking southwest at dense veg at landward toe.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: C: Corrected AVW: Acceptable but Monitor & Maintain En: Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.60	Rating **	U	Issue No.		185		
LM End	2.64	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS L	atitud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.9171	52°	37.916807°		
пеш				-121.3225	82°	-121.322069°		
DWR ID	DWR_RD0	524_01_s _ 201	14_185					
		Comn	nent Cod	de				
T2 : Thin t	rees to allo	ow visibility of	the grou	nd and roo	m to	flood fight.		
Inspector Comment								



Looking northwest at untrimmed trees on landward slope and toe.

LM Start	2.64	Rating **	U	Issue No.		43	
LM End	2.64	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	n		37.916780° 37.91			
item				-121.322095 ° -121.32			
DWR ID DWR_RD0524_01_s _ 2012_43							
Comment Code							
V4 : Elderk	perries are	blocking visib	ility and	flood fight	capa	ability.	
Inspector Comment							
Dense elde	erberry on	landward sho	ulder, sl	ope, and to	e.		



Looking southeast at dense veg on landward slope and toe fall 2015.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.65	Rating **	U	Issue No.		918
LM End	2.66	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Trim / Thi		37.9167	'18 °	37.916502°	
item				-121.322020 °		-121.321980 °
DWR ID	R ID DWR_RD0524_01_s _ 2012_918					
Comment Code						
T1 : Trim trees to at least five feet above ground level.						
Inspector Comment						
Untrimmed trees on landward slope and toe.						



Looking south at untrimmed trees on landward slope.

LM Start	2.65	Rating **	С	Issue No.		122	
LM End	2.65	Issue Type +	Ma	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR Ero	DWR Erosion Survey			50°	37.916650°	
item					30°	-121.321980°	
DWR ID							
Comment Code							

#### Comment Code

#### Inspector Comment

07/25/2016: No sign of erosion observed at the repaired site.

06/24/2015: No significant change observed.

06/19/2014: The erosion was repaired.

08/13/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection

report. [2016 Site ID:RD0524U01RM43.23]

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM End   2.77   Issue Type +   Ma   Location *   LS	LM Start	2.67	Rating **	М	Issue No.		44
Start   End   37.916418 ° 37.91514   -121.321963 ° -121.32301     DWR ID   DWR_RD0524_01_s _ 2012_44   Comment Code     T4 : Trim trees over roadway to at least 12 feet above ground level.	LM End	2.77	Issue Type +	Ma	Location *		LS
Start   End   37.916418 ° 37.91514   -121.321963 ° -121.32301	Catagony	Earthen L	evee		GPS La	atitud	le/Longitude
DWR ID DWR_RD0524_01_s _ 2012_44  Comment Code T4 : Trim trees over roadway to at least 12 feet above ground level.  Inspector Comment	Calegory				Start		End
DWR_RD0524_01_s _ 2012_44  Comment Code  T4 : Trim trees over roadway to at least 12 feet above ground level.  Inspector Comment	Itom	Trim / Thi	n Trees		37.916418° 37.915		
Comment Code T4 : Trim trees over roadway to at least 12 feet above ground level.  Inspector Comment	iteiii				-121.321963 ° -121.323		
T4 : Trim trees over roadway to at least 12 feet above ground level.  Inspector Comment	DWR ID	DWR_RD0524_01_s _ 2012_44					
Inspector Comment	Comment Code						
•	T4 : Trim trees over roadway to at least 12 feet above ground level.						
Trim over hanging trees at least 12 feet above ground level.	Inspector Comment						
	Trim over	hanging tre	es at least 12	2 feet ab	ove ground	leve	el.



Looking north at dense trees overhanging levee crown.

LM Start	2.70	Rating **	U	Issue No.		264
				Location *		
LM End	2.74	Issue Type +	Ma	Location		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Odlogory				Start		End
Item	Trim / Thi	n Trees		37.915968° 37.91		
пеш			-121.322275 °		-121.322607°	
DWR ID DWR_RD0524_01_s _ 2012_264						
		Comn	nent Cod	de		
T2 : Thin trees to allow visibility of the ground and room to flood fight.						
Inspector Comment						
Untrimmed	d trees alor	ng landward s	lope and	toe.		



Looking south at untrimmed trees on landward slope.

LM Start	2.74	Rating **	С	Issue No.		70
LM End	2.74	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Encroachi	ments		37.9155	37.915503	
пеш				-121.3227	-121.322745	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_70					
		Comn	nent Coc	de		
TR : Tree	or limb					
Inspector Comment						
Broken tre	e branch r	emoved.				

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.77	Rating **	U	Issue No.		219
LM End	2.80	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Animal Co	ontrol		37.9151	95 °	37.915052°
пеш	-121.322930 °				-121.323430 °	
DWR ID DWR_RD0524_01_f _ 2016_219						
Comment Code						
A1 : Exterminate rodents and backfill and compact or grout burrows.						
Inspector Comment						
Several lar	ge rodent	holes on land	ward slo	pe.		

Photo 1 of 2 : FA_2016_RD0524_107_219_20161013_00406.jpg

Looking south at several rodent holes on landward slope.

# LM Start 2.77 Rating \*\* U Issue No. 219 (cont) LM End 2.80 Issue Type + Ma Location \* LS

Photo 2 of 2: FA\_2016\_RD0524\_107\_219\_20161013\_00407.jpg



Looking at typical rodent hole on waterward slope.

LM Start	2.80	Rating **	U	Issue No.	48			
LM End	2.80	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS L	atitud	le/Longitude		
Odlogory				Start		End		
Item	Vegetatio	n		37.9150	)22°	37.915022°		
itom				-121.3234	43°	-121.323443 °		
DWR ID DWR_RD0524_01_s _ 2012_48								
		Comn	nent Cod	de				
V4 : Elderl	perries are	blocking visib	ility and	flood fight	capa	ability.		
		Inspecto	or Comm	nent				



Looking south at dense elderberry on landside slope.(Spring 2012)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.80	Rating **	U	Issue No.		48 (cont)	
LM End	2.80	Issue Type +	Ma	Location *		LS	
Catagony	evee	GPS La	atitud	e/Longitude			
Calegory	Category			Start		End	
Item	Vegetation			37.915022°		37.915022°	
iteiii				-121.3234	43 °	-121.323443°	
DWR ID	DWR_RD0	524_01_s _ 201	2_48				
Comment Code							
V4 : Elderberries are blocking visibility and flood fight capability.							

Inspector Comment



Looking south at elderberry on landside slope.(Spring 2011)

LM Start	2.82	Rating **	U	Issue No.		220	
LM End	2.87	Issue Type +	Ма	Location *		WS	٦
Category Earthen Levee				GPS La	atitud	le/Longitude	
Calegory	Category			Start		End	
Item	Vegetatio	า		37.9148	93°	37.914258	0
пеш				-121.3237	70°	-121.324328	0
DWR ID DWR_RD0524_01_f _ 2016_220							
Comment Code							

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Dense vegetation on waterward slope.

# Photo 1 of 1: FA\_2016\_RD0524\_107\_220\_20161013\_00408.jpg



Looking at dense veg on waterward slope.

LM Start	2.86	Rating **	U	Issue No.	49			
LM End	2.86	Issue Type +	Ма	Location *	LS			
Category	Earthen Levee				GPS Latitude/Longitude			
Category	Category			Start		End		
Item	Vegetatio	n		37.91442	27°	37.914427°		
пеш				-121.32419	8°	-121.324198°		
DWR ID DWR_RD0524_01_s _ 2012_49								
	Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

#### Inspector Comment



Looking northwest at elderberry on landside slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.87	Rating **	U	Issue No.		209	
LM End	2.87	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.9142	.57°	37.914257°	
пеш				-121.3243	17°	-121.324317°	
DWR ID DWR_RD0524_01_s _ 2016_209							
		Comn	nent Cod	de			
T1 : Trim t	rees to at I	east five feet	above g	round level.			
			_				
		Inspecto	or Comm	nent			
Untrimmed walnut tree on landward slope and toe.							



Looking northwest at untrimmed tree at landward toe.

LM Start	2.90	Rating **	U	Issue No.		50	
LM End	2.92	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		37.9137	67°	37.913503°	
item				-121.3244	27°	-121.324488 °	
DWR ID	DWR_RD0	524_01_s _ 201	2_50				
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			



Looking southwest at prunings on landside slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.93	Rating **	U	Issue No.		51		
LM End	2.93	Issue Type +	Ма	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Trim / Thi	n Trees		37.9134	15°	37.913415°		
item				-121.324503 °		-121.324503°		
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_51							
		Comn	nent Cod	de				
T1 : Trim t	rees to at I	east five feet	above g	round level				
		Inspecto	or Comm	nent				
Untrimmed	trees on l	landward slop	e and to	e.				

LM Start	2.93	Rating **	U	Issue No.	51 (cont)
LM End	2 93	Issue Type +	Ma	Location *	LS



Looking south at dense trees on landward slope fall 2015

Photo 2 of 2: FA\_2016\_RD0524\_107\_51\_20160929\_00103.jpg



Looking south at dense trees on landward slope spring 2015

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.96	Rating **	U	Issue No.		126		
LM End	2.96	Issue Type +	Ма	Location *		WS		
Category	Suppleme	ental		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	DWR Ero	sion Survey		37.9130	10°	37.913010°		
пеш			-121.324490 °		-121.324490 °			
DWR ID								
Comment Code								
		Inspecto	or Comm	nent				
07/25/2016	6: No signi	ficant change	observe	d.				
06/24/2015	5: No signi	ficant change	observe	d.				
06/19/2014: No significant change observed.								
08/13/2013: No significant change observed.								
08/07/2012: The site was first reported in 2012 spring levee inspection								
report. [2016 Site ID:RD0524U01RM43.52]								

LM Start	2.96	Rating **	U	Issue No.	126 (cont)
LM End	2.96	Issue Type +	Ma	Location *	WS



Upstream view of the erosion.

#### Photo 2 of 2: SJR2016\_RD0524U01RM43.52\_4.jpg



Close view of the erosion. Note the vegetation at the site.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.02	Rating **	M	Issue No.		924	
LM End	3.02	Issue Type +	Ma	Location *		LS	
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category						End	
Item	Animal Co	ontrol		37.9121	63°	37.912163°	
item				-121.324702 °		-121.324702 °	
DWR ID DWR_RD0524_01_s _ 2012_924							
		Comn	nent Cod	de			
A2 : Repai animal acc		slope damag	ed by liv	estock and	pre	vent large	
Inspector Comment							

No Photos

LM Start	3.07	Rating **	М	Issue No.		925	
LM End	3.27	Issue Type +	Ма	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Control			37.9113	82°	37.908602°	
itein				-121.3249	28°	-121.325395 °	
DWR ID DWR_RD0524_01_s _ 2012_925							
Comment Code							

A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

Several rodent holes on levee slopes.

LM Start	3.07	Rating **	М	Issue No.	925 (cont)
LM End	3.27	Issue Type +	Ма	Location *	LS

# Photo 1 of 2 : FA\_2016\_RD0524\_107\_925\_20160929\_00282.jpg



Looking at typical view of rodent hole with this section fall 2015.

Photo 2 of 2: FA\_2016\_RD0524\_107\_925\_20160929\_00283.jpg



Looking at typical rodent holes on landward slope along this reach.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence

CR: Crown

\*\* Rating

A: Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable M: N: Not Inspected/Rated Ob: Design & System Obsolescence

C: Corrected Ob: Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.23	Rating **	С	Issue No.		128	
LM End	3.31	Issue Type +	Ма	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR Erosion Survey			37.90854	14 °	37.908544°	
item				-121.32489	94 °	-121.324894°	
DWR ID							
Comment Code							

No Photos

## Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed.

06/19/2014: No significant change observed.

08/13/2013: New erosion was found at the levee toe. Trees are present.

08/07/2012. The site has been repaired. Protecting riprap revetment has been placed at the levee shoulder and slope, but minor erosions are visible at the levee toe.

08/23/2011: Sloughing rip rap is visible on the site [2016 Site

ID:RD0524U01RM43.83]

LM Start	3.27	Rating **	М	Issue No.		186		
LM End	3.27	Issue Type +	Ma	Location *		WS		
	Earthen L	**	IVIG	GPS La	atitud	e/Longitude		
Category			Start		End			
Item	Trim / Thin Trees				51°	37.908551 °		
item				-121.325381 °		-121.325381°		
DWR ID	DWR ID DWR_RD0524_01_s _ 2014_186							
		Comn	nent Cod	de				
T1: Trim t	rees to at I	east five feet	above g	round level				
Inspector Comment								

No Photos

LS : Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.30	Rating **	U	Issue No.		129	
LM End	3.32	Issue Type +	Ma	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory				Start		End	
DWR Erosion Survey			37.908090°		37.908090°		
item			-121.325090 °		-121.325090 °		
DWR ID							
Comment Code							

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2016 Site ID:RD0524U01RM43.86]

Photo 1 of 1: SJR2016\_RD0524U01RM43.86\_3.jpg

Close view of the erosion. Note the river rocks and vegetation at the levee toe.

LM Start	3.30	Rating **	U	Issue No.		926		
LM End	3.38	Issue Type +	Ма	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Trim / Thin Trees				37.908158°		37.907080°		
пеш				-121.3254	18 °	-121.325366°		
DWR ID DWR_RD0524_01_s _ 2012_926								
Comment Code								

T1 : Trim trees to at least five feet above ground level.

### Inspector Comment

LM Start	3.30	Rating **	U	Issue No.	926 (cont)
LM End	3.38	Issue Type +	Ma	Location *	LS

### Photo 1 of 2: FA\_2016\_RD0524\_107\_926\_20160929\_00284.jpg



Looking southwest at dense veg on landward slope.

Photo 2 of 2: FA\_2016\_RD0524\_107\_926\_20160929\_00285.jpg



Looking at untrimmed trees on landward slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

-									
LM Start	3.36	Rating **	М	Issue No.		53			
LM End	3.42	Issue Type +	Ma	Location *		WS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Animal Co	ontrol		37.9072	83°	37.906503°			
-121.325432				32°	-121.325002°				
DWR ID DWR_RD0524_01_s _ 2012_53									
		Comn	nent Cod	de					
A1 : Exter	minate rod	ents and back	fill and o	compact or	grou	it burrows.			
		Inspecto	or Comm	nent					

No Photos

LM Start	3.42	Rating **	С	Issue No.		56	
LM End	3.42	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Encroachments			37.9065	40°	37.906540°	
пеш	item				15 °	-121.325015°	
DWR ID	DWR_RD0	524_01_s _ 201	2_56				
		Comn	nent Cod	le			
MA : Mate	rial						
Inspector Comment							
Landowner removed broken concrete pipes from landward slope.							

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.45	Rating **	U	Issue No.		54	
LM End	3.45	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thin Trees			37.9062	27°	37.906227°	
item				-121.3246	-121.324683 °		
DWR ID DWR_RD0524_01_s _ 2012_54							
		Comn	nent Cod	le			
T3 : Trim a flood fight.		es to allow vis	sibility of	the ground	and	froom to	
		Inspecto	or Comm	ent			
Dense untrimmed trees on landward slope.							

hoto 1 of 1 : FA_2016_RD0524_107_54_20160929_00105.jp	g

Looking northwest at dense vegetation on landside slope.

LM Start	3.48	Rating **	М	Issue No.		177	
LM End	3.48	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachments			37.9059	94°	37.905994°	
пеш	item				94°	-121.324194°	
DWR ID DWR_RD0524_01_f _ 2014_177							
		Comn	nent Cod	de			
TR : Tree	or limb						
Inspector Comment							
Dead tree on landward toe.							



Looking at dead tree limb at landward toe fall 2015.

LM Start	3.51	Rating **	U	Issue No.		57		
LM End	3.61	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	titud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thin Trees			37.9056	38°	37.904430°		
пеш				-121.3238	92 °	-121.324570 °		
DWR ID	DWR_RD0	524_01_s _ 201	12_57			*		
	Comment Code							
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.								

Inspector Comment



Looking south at dense trees on landward slope.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.56	Rating **	С	Issue No.		131
LM End	3.58	Issue Type +	Ма	Location *		WS
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR Ero	sion Survey		37.9046	30°	37.904630°
пеш				-121.3236	10°	-121.323610°
DWR ID						

Comment Code

#### Inspector Comment

07/25/2016: No significant change observed. The erosion at the levee toe discovered last year is still visible.

06/24/2015: No significant change observed.

06/19/2014: The previous erosion was repaired. New erosion was found below the repaired levee slope.

08/13/2013: No significant change observed.

08/07/2012: The levee toe has been cut off along a 150 ft. long river stretch. The erosion is located just upstream of a river bend. [2016 Site ID:RD0524U01RM44.13]

LM Start	3.64	Rating **	М	Issue No.		58	
LM End	3.64	Issue Type +	Ма	Location *		WS	
Earthen Levee				GPS Latitude/Longitude			
Category						End	
Item	Slope Sta	bility		37.9041	13°	37.904113°	
item				-121.3250	80°	-121.325080 °	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_58					·	

### Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

### Inspector Comment

Landowner cut steps into waterside slope.



Looking southeast steps cut into waterside slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.65	Rating **	U	Issue No.		190	
LM End	3.65	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	Vegetation			70°	37.904070°	
пеш				-121.325118°		-121.325118°	
DWR ID	DWR_RD0	524_01_f _ 201	5_190				
		Comn	nent Cod	de			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
Inspector Comment							
Large cent	Large century plant at landward toe.						



Looking southwest at century plant at landward toe fall 2015.

LM Start	3.75	Rating **	U	Issue No.	52		
LM End	3.75	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Category	liegory			Start		End	
Item	Trim / Thin Trees			37.902828°		37.902828	
пеш				-121.3261	70°	-121.326170	
DWR ID	DWR_RD0	524_01_s _ 201	6_52				
		Comn	nent Cod	le			
T1 : Trim trees to at least five feet above ground level.							
	Inspector Comment						



Looking south at untrimmed tree on landward slope and toe.

LM Start	3.77	Rating **	U	Issue No.		927	
LM End	3.77	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Trim / Thi	n Trees		37.9026	45°	37.902645°	
item				-121.326340°		-121.326340°	
DWR ID DWR_RD0524_01_s _ 2012_927							
		Comn	nent Cod	de			
T1 : Trim t	rees to at I	east five feet	above g	round level	-		
		Inspecto	or Comm	nent			
Untrimmed	Untrimmed almond tree on landward slope.						



Looking southwest at untrimmed tree at landward toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.78	Rating **	U	Issue No.		59	
LM End	3.78	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.9024	17°	37.902417°	
item				-121.326482 °		-121.326482 °	
DWR ID DWR_RD0524_01_s _ 2012_59							
		Comn	nent Cod	de			
T1 : Trim t	rees to at	east five feet	above g	round level			
			_				
		Inspecto	or Comm	nent			



Looking south at dense veg on landward slope and toe.

LM Start	3.80	Rating **	U	Issue No.		928	
LM End	3.81	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.9021	55°	37.902002°	
item				-121.326523 °		-121.326550°	
DWR ID	DWR_RD0	524_01_s _ 201	2_928				
		Comn	nent Cod	de			
T1: Trim t	rees to at I	east five feet	above g	round level.			
			_				
	Inspector Comment						
Several trees on landward slope.							



Looking south at dense vegetation on landward slope and toe.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.85	Rating **	С	Issue No.		187		
LM End	3.85	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachi	ments	37.9014	47°	37.901447°			
пеш				-121.3265	00°	-121.326500°		
DWR ID	DWR_RD0	524_01_s _ 201	4_187					
		Comn	nent Cod	de				
TR : Tree	or limb							
		Inspecto	or Comm	nent				
Tree limb on waterward shoulder.								

No Photos

LM Start	3.88	Rating **	U	Issue No.		94
LM End	3.88	Issue Type +	Ма	Location *		WS
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory	Category			Start		End
Item	Vegetatio	n		37.9009	52°	37.900952°
item				-121.3264	43 °	-121.326443°
DWR ID DWR_RD0524_01_s _ 2012_94					·	
		Comn	nent Coc	łe		

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Remove cactus from waterward slope.

LM Start	3.88	Rating **	U	Issue No.	94 (cont)
LM End	3.88	Issue Type +	Ма	Location *	WS

### Photo 1 of 2: FA\_2016\_RD0524\_107\_94\_20160929\_00151.jpg



Looking southeast at cactus on waterward slope fall 2015

Photo 2 of 2: FA\_2016\_RD0524\_107\_94\_20160929\_00152.jpg



Looking southeast at cactus on waterside slope. Fall 2013

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence

CR: Crown

\*\* Rating

A: Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable M: N: Not Inspected/Rated Ob: Design & System Obsolescence

C: Corrected Ob: Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.89	Rating **	U	Issue No.	83		
LM End	3.89	Issue Type +	Ma	Location *		LS	
Category	evee		GPS La	atitud	e/Longitude		
Calegory			Start		End		
Item	Trim / Thi	n Trees		37.9008	854°	37.900854°	
item	-121.326438 ° -121.3264						
DWR ID DWR_RD0524_01_s _ 2012_83							
		Comn	nent Cod	de			
T1 : Trim t	rees to at	east five feet	above g	round level			
		Inspecto	or Comm	nent			
Untrimmed tree on landward slope.							



Looking south at untrimmed trees on landward slope and toe.

LM Start	4.03	Rating **	М	Issue No.	61			
LM End	4.03	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Trim / Thin Trees				37.8989	25°	37.898925°		
item				-121.327015 °		-121.327015°		
DWR ID	DWR_RD0	524_01_s _ 201	2_61					
		Comn	nent Cod	de				
T1: Trim t	rees to at	east five feet	above g	round level				
Inspector Comment								



Looking east at untrimmed tree at landward toe.

LM Start	4.04	Rating **	С	Issue No.		64	
LM End	4.09	Issue Type +	Ma	Location *		LS	
Category	Category Earthen Levee			GPS La	atitud	le/Longitude	
Odlogory				Start		End	
Item	Animal Co	ontrol		37.898832 °		37.898090	٥
item				-121.3270	92°	-121.327457	٥
DWR ID DWR_RD0524_01_s _ 2012_64							
Comment Code							
A3 · No ro	dents visib	le but rodent	hurrows	visible: nee	ed to	hackfill and	Т

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

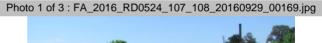
# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.05	Rating **	С	Issue No.		62	
LM End	4.05	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		37.8987	'17 °	37.898717°	
пеш				-121.327138 °		-121.327138°	
DWR ID	DWR_RD0	524_01_f _ 201	5_62				
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			
Pruning pile at landward toe.							

LM Start	4.10	Rating **	U	Issue No.		108	
LM End	4.15	Issue Type +	Ма	Location *		LS	
Category	Earthen Levee					e/Longitude	
Category				Start		End	
Item	Slope Sta	bility		37.8980	35°	0	
item				-121.3274	47°	-121.327806°	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_108						
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inanact	or Comm	ont			
		mspecii	or Comm	ieni			
Slope depression is greater than 1" and longer than 200'.							

LM Start	4.10	Rating **	U	Issue No.	108 (cont)
LM End	4.15	Issue Type +	Ma	Location *	LS





Looking north at caving slope on landside of levee.

Photo 2 of 3: FA\_2016\_RD0524\_107\_108\_20160929\_00170.jpg



Looking south at damage slope on landside of levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.10	Rating **	U	Issue No.		108 (cont)			
LM End	4.15	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Category				Start		End			
Item	Slope Sta	bility		37.8980	35°	0			
пеш				-121.3274	47°	-121.327806 °			
DWR ID DWR_RD0524_01_s _ 2012_108									
	Comment Code								
S1 : Repai	r slope ins	tability.							
		Inspecto	or Comm	nent					
Slope depression is greater than 1" and longer than 200'.									



Looking southwest at caving slope on landside of levee. (Spring 2014)

LM Start	4.16	М	Issue No.		213			
LM End	4.16	Issue Type +	Ма	Location *	LS			
Category	Earthen Levee				atitud	le/Longitude		
Category				Start		End		
Item	Encroach	ments		37.8972	35°	37.897235°		
пеш	item				65°	-121.327865°		
DWR ID DWR_RD0524_01_s _ 2016_213								
	Comment Code							

GA: Garbage

### Inspector Comment

Old fence post and concrete and brick rubble on landward slope.



Looking west at old fence post and concrete rubble on landward slope.

LM Start	4.36	Rating **	С	Issue No.		65	
LM End	4.51	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Category				Start Er		End	
Item	Animal Control			37.8945	87°	37.892493	0
пеш				-121.3292	53°	-121.328267	0
DWR ID	DWR_RD0524_01_s _ 2012_65						

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.40	Rating **	U	Issue No.	112				
LM End	4.53	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Trim / Thi	n Trees		37.8939	28°	37.892230°			
пеш				-121.329203 °		-121.328187 °			
DWR ID DWR_RD0524_01_s _ 2012_112									
	Comment Code								
T1 : Trim t	rees to at I	east five feet	above g	round level	-				
		Inspecto	or Comm	nent					
Untrimmed trees along landward slope and toe.									

LM Start	4.40	Rating **	U	Issue No.	112 (cont)
LM End	4.53	Issue Type +	Ма	Location *	LS



Looking southeast at untrimmed tree at landward toe.

Photo 2 of 2: FA\_2016\_RD0524\_107\_112\_20160929\_00175.jpg



Looking northeast at untrimmed tree on landward slope and toe fall 2015.

LM Start	4.43	Rating **	U	Issue No.		199			
LM End	4.43	Issue Type +	Ма	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroachi	ments		37.8935	82°	37.893582°			
item				-121.329108°		-121.329108°			
DWR ID DWR_RD0524_01_f _ 2015_199									
Comment Code									
TR : Tree	or limb								
Inspector Comment									
Remove dead tree from landward toe.									



Looking west at dead tree on landward slope and toe fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	<b>4.53</b> Rating ** U		Issue No.		132		
LM End	4.54	54 Issue Type + Ma		Location *		WS	
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
Item	DWR Erosion Survey				30°	37.892230°	
item			-121.3279	30°	-121.327930°		
DWR ID						·	
Comment Code							

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2016 Site ID:RD0524U01RM45.07]

LM Start	4.53	Rating **	U	Issue No.	132 (cont)
LM End	4.54	Issue Type +	Ma	Location *	WS



Front view of the site. Note the loosely placed concrete blocks at the site.

### Photo 2 of 2: SJR2016\_RD0524U01RM45.07\_4.jpg



Upstream view of the erosion.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.61	Rating **	U	Issue No.		63		
LM End	4.61	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.8912	85°	37.891285 °		
пеш				-121.328728°		-121.328728°		
DWR ID DWR_RD0524_01_s _ 2012_63								
		Comn	nent Cod	de				
Γ1 : Trim t	rees to at I	east five feet	above g	round level				
		Inchacte	or Comm	ont				
		mspecii	or Comm	ieni				



Looking south at dense trees on landside slope.

LM Start	4.63	Rating **	M	Issue No.		113	
LM End	4.63	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS La	atitud	e/Longitude	
				Start		End	
Item	Trim / Thin Trees			37.890973°		37.890973°	
item				-121.328970 °		-121.328970°	
DWR ID	DWR_RD0	524_01_s _ 201	2_113				
		Comn	nent Cod	de			
T1 : Trim trees to at least five feet above ground level.							
		Inchecto	or Comm	ont			

Inspector Comment

Photo 1 of 1: FA_2016_RD0524_107_113_20160929_00176.	.jpg
Commence of the second second	

Looking north at dense trees on landside slope.

LM Start	4.70	Rating **	U	Issue No.	67	
LM End	4.70	Issue Type +	Ma	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Item	Trim / Thi	n Trees		37.890108°		37.890108°
item				-121.329523 °		-121.329523 °
DWR ID DWR_RD0524_01_s _ 2012_67						
Comment Code						

T1 : Trim trees to at least five feet above ground level.

### Inspector Comment

Fig tree at landside toe.



Looking northwest at untrimmed tree on landward slope.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence C: Corrected A/W: Acceptable but Monitor & Maintain Enforcement

\* Issue Type
Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.71	Rating **	С	Issue No.		133		
LM End	4.71	Issue Type +	Ma	Location *	WS			
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category					End		
ltom	DWR Erosion Survey			37.8898	)9°	37.889809°		
пеш				-121.3293	12 °	-121.329342°		
DWR ID						·		

Comment Code

#### Inspector Comment

07/25/2016: No sign of new erosion observed at the site.

06/24/2015: No significant change observed.

06/19/2014: The erosion was repaired.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant

change observed

08/23/2011: Cracking erosion along the levee bank. Erosion appears to be caused by river flows. [2016 Site ID:RD0524U01RM45.27]

LM Start	4.90	Rating **	U	Issue No.		84		
LM End	4.93	Issue Type +	Ma	Location *	LS			
Category Earthen Levee			GPS La	atitud	le/Longitude			
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.8876	55°	37.887277°		
пеш			-121.331202°		-121.331609°			
DWR ID DWR_RD0524_01_s _ 2012_84								
		Comn	nent Cod	de				
T1: Trim t	rees to at I	east five feet	above g	round level.				
			_					
		Inspecto	or Comm	nent				
Untrimmed trees on landward slope.								

### Photo 1 of 1 : FA\_2016\_RD0524\_107\_84\_20161013\_00412.jpg



Looking west at untrimmed tree on landward slope.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.96	Rating **	U	Issue No.		114
LM End	4.98	Issue Type +	Ма	Location *		LS
Earthen Levee			GPS La	atitud	e/Longitude	
Category			Start		End	
ltom	ltem Vegetation				07°	37.886673°
пеш					62 °	-121.331965 °
DWR ID DWR_RD0524_01_s _ 2012_114						
Comment Code						
V4 : Elderl	perries are	blocking visit	ility and	flood fight	сара	ability.
		Inspect	or Comm	nent		
Dense eld	erberry on	landward slop	oe.			



Looking southwest at dense elderberry bush on landward slope and toe fall 2015.

LM Start	5.05	Rating **	U	Issue No.		188	
LM End	5.17	Issue Type +	Ма	Location *		LS	
Cotogon Earthen Levee				GPS La	atitud	e/Longitude	
Category	Category					End	
Item	Trim / Thi	n Trees		37.8856	17°	37.883938°	
item			-121.332143 °		-121.332130°		
DWR ID DWR_RD0524_01_s _ 2014_188							
		Comn	nent Cod	de			
T1: Trim t	rees to at I	east five feet	above g	round level.			
		Inspecto	or Comm	nent			
Untrimmed	trees on l	andward slop	e and to	e.			



Looking south at oleander on landward slope.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.07	Rating **	U	Issue No.		68
LM End	5.07	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	atitud	le/Longitude
				Start		End
Item	Trim / Thin Trees			37.8854	00°	37.885400 °
-121.332153 °					53°	-121.332153 °
DWR ID DWR_RD0524_01_s _ 2012_68						
Comment Code						
T4 : Trim t	rees over i	roadway to at	least 12	feet above	grou	und level.
		Inspecto	or Comm	ent		



Looking south at overhanging trees.

LM Start	5.16	Rating **	С	Issue No.		72	
LM End	5.16	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.8840	75°	37.884075	0
пеш				-121.3321	18°	-121.332118	0
DWR ID	DWR_RD0	524_01_s _ 201	2_72				
		0		l a			

Comment Code

T4: Trim trees over roadway to at least 12 feet above ground level.

Inspector Comment

No Photos

LM Start	5.19	Rating **	М	Issue No.		115
LM End	5.19	Issue Type +	Ma	Location *		LS
Category	Earthen L	.evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Slope Sta	bility		37.8835	87°	37.883587°
пеш				-121.3321	00°	-121.332100°
DWR ID	DWR_RD0	524_01_s _ 201	2_115			
		0		l a		

#### Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

### Inspector Comment

Vehicle traffic created a ramp on landward slope.

### Photo 1 of 1 : FA\_2016\_RD0524\_107\_115\_20160929\_00178.jpg



Looking northwest at slope damage on landward slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Category	5.22 Earthen Le	Issue Type +	Ма	Location *  GPS La	atitud	WS e/Longitude
Category		evee		GPS La	atitud	e/Longitude
E	ncroachr					C/Longitude
	ncroachr			Start		End
	Jaoi II	nents		37.883170°		37.883170°
пеш			-121.332227°		-121.332227°	
DWR ID DWR_RD0524_01_s _ 2012_116						
		Comm	nent Coc	de		
TR : Tree or	r limb					
			_			
		Inspecto	or Comm	nent		
Dead tree lir	mbs on w	aterside slope	э.			

LM Start	5.28	Rating **	U	Issue No.		85
LM End	5.34	Issue Type +	Ма	Location *		LS
Category Earthen Levee			GPS La	atitud	le/Longitude	
Category	gory		Start		End	
Item	Trim / Thi	rim / Thin Trees			77°	37.881498°
item				-121.3325	98°	-121.332800 °
DWR ID	DWR_RD0	524_01_s _ 201	2_85			
		Comn	nent Cod	de		
T1: Trim t	rees to at	east five feet	above g	round level		
		Inspecto	or Comm	nent		



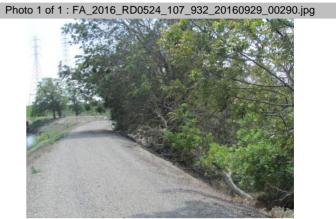
Looking south at untrimmed trees on landward slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.38	Rating **	U	Issue No.		932
LM End	5.41	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory	Category					End
Item	Trim / Thi	n Trees	37.8809	945°	37.880522°	
item				-121.3328	37°	-121.332918 °
DWR ID DWR_RD0524_01_s _ 2012_932						
Comment Code						
T1 : Trim t	rees to at	east five feet	above g	round level		
		Inspecto	or Comm	nent		



Looking south at untrimmed trees on landward slope and toe.

LM Start	5.39	Rating **	M	Issue No.		178
LM End	5.39	Issue Type +	Ма	Location *		LS
Category Earthen Levee			GPS La	atituc	le/Longitude	
				Start		End
Item	Encroachments			37.8808	06°	37.880806°
item				-121.332833 ° -121.3		
DWR ID DWR_RD0524_01_f _ 2014_178						
Comment Code						
TR : Tree	or limb					
		Inspecto	or Comm	nent		
Downed tr	ee on land	ward toe.				



Looking south at downed tree on landward slope.

LM Start	5.41	Rating **	С	Issue No.		931			
LM End	5.41	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Category		Start		End					
Item	Animal Co	ontrol		37.8805	75°	37.880575	0		
пеш				-121.3328	90°	-121.332890	0		
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_931								
		Comn	nent Cod	de					
A1 : Exterr	minate rod	ents and back	fill and o	compact or	grou	ıt burrows.	_		
	Inspector Comment								
LMA grout	ed rodent l	holes.							

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

	F 40	Poting **	N 4	Issue No.		440	
LM Start	5.42	Rating **	М	issue ivo.	118		
LM End	5.42	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Slope Stability				37.8803	23°	37.880323°	
пеш				-121.3329	-121.332968°		
DWR ID DWR_RD0524_01_s _ 2012_118							
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comn	nent			
Slope damage caused by human activity.							

LM Start	5.42	Rating **	М	Issue No.	118 (cont)
LM End	5.42	Issue Type +	Ма	Location *	LS

LM End



Looking west at slope damage on landside slope.

Photo 2 of 3: FA\_2016\_RD0524\_107\_118\_20160929\_00181.jpg



Looking southeast at damaged slope.

LM Start	5.42	Rating **	М	Issue No.	118 (cont)
LM End	5.42	Issue Type +	Ма	Location *	LS



Looking east at slope caving on landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.43	Rating **	U	Issue No.		134	
LM End	5.43	Issue Type +	Ma	Location *	WS		
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR Ero	sion Survey		37.8803	20°	37.880320°	
пеш					66 °	-121.333266 °	
DWR ID							
	Comment Code						

### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed.

08/13/2013: The erosion seems to be getting worse. More material sloughing visible.

08/07/2012: The erosion is underneath an irrigation pipe. The likely cause of the erosion is the pipe leakage. [2016 Site ID:RD0524U01RM45.97]

LM Start	5.43	Rating **	U	Issue No.	134 (cont)
LM End	5.43	Issue Type +	Ма	Location *	WS



Close view of the erosion and the pipe on the site.

### Photo 2 of 2: SJR2016\_RD0524U01RM45.97\_4.jpg



Front view of the site.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.44	Rating **	U	Issue No.		73		
LM End	5.44	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.8800	85°	37.880085 °		
пеш				-121.333045 ° -121.3330				
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_73							
		Comn	nent Cod	de				
T1 : Trim t	rees to at I	east five feet	above g	round level	-			
		Inspecto	or Comm	nent				
Untrimmed	trees on l	andward slop	e.					



Looking southwest at large untrimmed tree on landward slope.

LM Start	5.45	Rating **	М	Issue No.		189				
LM End	5.45	Issue Type +	Ma	Location *		LS				
Category Earthen Levee GPS Latitude/Longit										
Category				Start		End				
Item	Encroach	ments		37.8799	98°	37.879998	0			
-121.333079 ° -121.333079										
DWR ID DWR_RD0524_01_s _ 2014_189										
Comment Code										
PR : Pruni	PR : Prunings									
Inspector Comment										
Prunings on landward shoulder should be removed.										

No Photos

							_			
LM Start	5.52	Rating **	С	Issue No.		96				
LM End	5.52	Issue Type +	Ма	Location *		WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Category				Start		End				
Item	Trim / Thi	n Trees		37.8789	18°	37.878918	0			
						-121.333148	0			
DWR ID DWR_RD0524_01_s _ 2012_96										
Comment Code										
T1 : Trim trees to at least five feet above ground level.										
Inspector Comment										

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.53	Rating **	М	Issue No.		135		
LM End	5.53	Issue Type +	ype + Ma Location * WS					
Category Supplemental GPS Latitude/Longitude								
Calegory			Start		End			
Item	DWR Erosion Survey					37.878920°		
пеш				-121.3326	70°	-121.332670 °		
DWR ID								
	Comment Code							

#### Inspector Comment

07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 6/19/2014: No significant change observed.

08/13/2013: Larger trees are at the levee shoulder, and an irrigation

pump station is next to the erosion site. [2016 Site

ID:RD0524U01RM46.06]

LM Start	5.53	Rating **	М	Issue No.	135 (cont)
LM End	5.53	Issue Type +	Ма	Location *	WS



Close view of the site. Note large trees at the levee shoulder.

### Photo 2 of 2: SJR2016\_RD0524U01RM46.06\_4.jpg



Close view of the erosion.

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### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.58	Rating **	U	Issue No.		214		
LM End	5.58	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Vegetatio	n		37.8780	83°	37.878083 °		
пеш				-121.3327	'17 °	-121.332717 °		
DWR ID DWR_RD0524_01_s _ 2016_214								
Comment Code								
V2 : Remove the wild growth other than native grasses from the levee slopes.								
		Inspecto	or Comm	nent				
Tall weeds, grasses and trees blocking view of landward toe.								

hoto 1 of 2 : FA_2016_RD0524_107_214_20160929_00258.jį	pg
<b>这是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个</b>	
CAR WAS TO SEE THE PERSON OF T	
<b>一种,这种种种的一种,</b>	
And the state of t	

 LM Start
 5.58
 Rating \*\*
 U
 Issue No.
 214 (cont)

 LM End
 5.58
 Issue Type +
 Ma
 Location \*
 LS

Photo 2 of 2: FA\_2016\_RD0524\_107\_214\_20160929\_00259.jpg



Looking west at dense veg at landward toe.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.60	Rating **	С	Issue No.		137
LM End	5.61	Issue Type +	Ма	Location *		WS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR Erosion Survey			37.8778	80°	37.877880 °
item				-121.332550 ° -121.332550		
DWR ID						·

Comment Code

#### Inspector Comment

07/25/2016: No sign of erosion observed at the repaired site.

06/24/2015: No significant change observed.

06/19/2014: The erosion was repaired.

08/13/2013: The boat survey found no significant change at this site,

except slight animal activity was visible at the site.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Erosion site is located beneath Howard Road Bridge. Majority of the existing rip rap has slipped, dragging away levee materials and exposing the underlying soft soil.

08/06/2010: Recommend for annual assessment and monitoring during flood events, per CLRO.

09/30/2009: No major change observed since the last visit; upper portion of existing revetment has slipped, exposing the degrading bank; note that site # is the same as RM46.30, LM5.69 found in the CLRO CES Evaluation 2008 Report; site was previously rated "M"

11/04/2008: Previously repaired using rock revetment; upper portion of the revetment is sliding, causing deformation on the levee slope; site is upstream of Howards Road Bridge. [2016 Site ID:RD0524U01RM46.12]

Photo 1 of 3: FA 2016 RD0524 107 215 20160929 00260.jpg							
	Photo 1 of 3 · FA	2016	RD0524	107	215	20160929	00260 ina

No Photos



Looking north at damage slope on landward slope.

LM Start	5.64	Rating **	U	Issue No.	215			
LM End	5.64	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee	GPS Latitude/Longitude					
Calegory				Start En		End		
Item	Slope Stability		37.8773	78°	37.877378°			
item				-121.3323	43 °	-121.332343 °		
DWR ID DWR_RD0524_01_s _ 2016_215								
	Comment Code							

S1: Repair slope instability.

### Inspector Comment

Levee slope damage is due vehicle traffic and foot traffic. Vehicle traffic created a ramp on landward slope.

Location

LS: Land Side N/A: Not Applicable WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C: Corrected

+ Issue Type

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.64	Rating **	U	Issue No.	215 (cont)		
LM End	5.64	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start End			
Item	Slope Sta	bility		37.8773	78°	37.877378°	
item				-121.3323	43 °	-121.332343 °	
DWR ID DWR_RD0524_01_s _ 2016_215							
	Comment Code						

S1: Repair slope instability.

### Inspector Comment

Levee slope damage is due vehicle traffic and foot traffic. Vehicle traffic created a ramp on landward slope.

LM Start	5.64	Rating **	U	Issue No.	215 (cont)
LM End	5.64	Issue Type +	Ma	Location *	LS



Looking north at slope damage (ramp) on landward slope.

Photo 3 of 3: FA\_2016\_RD0524\_107\_215\_20160929\_00262.jpg



Looking west at damage slope on landward slope.

Photo 1 of 2: FA\_2016\_RD0524\_107\_69\_20160929\_00117.jpg

LM Start	5.64	Rating **	U	Issue No.	69			
LM End	5.80	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start En		End	nd	
Item	Animal Co	ontrol		37.8772	98°	37.875073	0	
пеш				-121.3323	43 °	-121.333168	o	
DWR ID	DWR_RD0	524_01_s _ 201	2_69					
	Comment Code							
							_	

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

District has grouted rodent holes. But rodents have re-appeared.



* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.64	Rating **	U	Issue No.		69 (cont)	
LM End	5.80	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		37.8772	98°	37.875073°	
item				-121.3323	121.332343 ° -121.33		
DWR ID	DWR_RD0	524_01_s _ 201	2_69				
		Comn	nent Cod	de			
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.							
Inspector Comment							
District has grouted rodent holes. But rodents have re-appeared.							



Looking south at rodent holes on landward slope.

LM Start	5.64	Rating **	U	Issue No.		117
LM End	5.64	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thin Trees			37.8772	72°	37.877272°
пеш				-121.332400 ° -121.3324		-121.332400 °
DWR ID DWR_RD0524_01_f _ 2013_117						
		Comn	nent Cod	de		
T1: Trim t	rees to at	east five feet	above g	round level		
			_			
		Inspecto	or Comm	nent		



Looking northwest at untrimmed tree on landward slope.

		D 11 ++		l. N			Ξ
LM Start	5.77	Rating **	М	Issue No.		196	
LM End	5.77	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS L	atitud	le/Longitude	
Category				Start		End	
Item	Trim / Thi	n Trees	37.8755	10°	37.875510	0	
пеш				-121.3329	953°	-121.332953	0
DWR ID	DWR_RD0	524_01_s _ 201	5_196				
		Comn	nent Coo	de			
T1 : Trim t	rees to at	east five feet	above g	round level			
		Inspecto	or Comm	nent			
Untrimmed	d tree on la	andward slope	and toe				

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.79	Rating **	М	Issue No.	197			
LM End	5.79	Issue Type +	Ma	Location *	LS			
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Animal Co	ontrol		37.8753	10°	37.875310°		
пеш				-121.3330	65°	-121.333065°		
DWR ID DWR_RD0524_01_s _ 2015_197								
		Comn	nent Cod	de				
A1 : Exteri	minate rod	ents and back	fill and o	compact or	grou	t burrows.		
		Inspecto	or Comn	nent				
Several rodent holes on landward slope and levee crown.								

LM Start	5.79	Rating **	М	Issue No.	197 (cont)
LM End	5 79	Issue Type +	Ma	Location *	LS



Looking north at typical view of rodent holes on landward slope.

Photo 2 of 2: FA\_2016\_RD0524\_107\_197\_20160929\_00240.jpg



Looking southwest at typical view of rodent hole at landward shoulder.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.86	Rating **	U	Issue No.		139		
LM End	5.86	Issue Type +	Ма	Location *	WS			
Category Supplemental			GPS Latitude/Longitude					
			Start		End			
Item	DWR Ero	sion Survey		37.8743	870°	37.874370°		
пеш		-121.3328	850°	-121.332850 °				
DWR ID								
Comment Code								
		Inspecto	or Comm	nent				
		ficant change						
		ficant change						
06/19/2014: No significant change observed.								
	08/13/2013: No significant change observed.							
08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2016 Site ID:RD0524U01RM46.39]								

LM Start	5.86	Rating **	U	Issue No.	139 (cont)
LM End	5.86	Issue Type +	Ma	Location *	WS



Close view of the erosion and the pipe on the site.

### Photo 2 of 2: SJR2016\_RD0524U01RM46.39\_4.jpg



Upstream view of the erosion and vegetation at the site.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.86	Rating **	М	Issue No.		75
LM End	5.88	Issue Type +	Ma	Location *		WS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory				Start		End
Itom	Animal Co	ontrol		37.874240°		37.874002°
Item				-121.3331	87°	-121.333027°
DWR ID DWR_RD0524_01_s _ 2012_75						
Comment Code						

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

District has grouted rodent holes, but other rodent holes have appeared.

LM Start	5.86	Rating **	М	Issue No.	75 (cont)
LM End	5.88	Issue Type +	Ма	Location *	WS



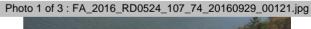
Looking southwest at typical rodent holes on waterward slope.

Photo 2 of 2: FA\_2016\_RD0524\_107\_75\_20160929\_00125.jpg



Looking typical view of several rodent holes on landward slope and toe.

LM Start	5.86	Rating **	U	Issue No.		74			
LM End	5.87	Issue Type +	Ма	Location *		WS			
Earthen Levee				GPS La	atitud	le/Longitude			
Category				Start		End			
Item	Erosion / I	Bank Caving		37.8742	240°	37.874165°			
пеш				-121.3331	85°	-121.333155°			
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_74								
		Comn	nent Cod	de					
E1 : Note a	and monito	or erosion site							
		Inspecto	or Comm	nent					
Erosion on	Erosion on landward slope around intake pipe.								





Looking southeast at erosion around pipe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.86	Rating **	U	Issue No.	74 (cont)		
LM End	5.87	Issue Type +	Ma	Location *	WS		
Category	Earthen Levee				atituc	le/Longitude	
Category				Start		End	
Item	Erosion / I	Bank Caving		37.8742	40°	37.874165°	
пеш				-121.333185 °		-121.333155 °	
DWR ID DWR_RD0524_01_s _ 2012_74							
		Comn	nent Cod	de			
E1 : Note a	and monito	or erosion site					
		Inspecto	or Comm	nent			
Erosion on	landward	slope around	intake p	ipe.			

LM Start	5.86	Rating **	U	Issue No.	74 (cont)
LM End	5.87	Issue Type +	Ma	Location *	WS



Looking west at erosion around intake pipe on landward slope.

Photo 3 of 3: FA\_2016\_RD0524\_107\_74\_20160929\_00123.jpg



Erosion at waterward toe and around irrigation pipe at LM 5.92

LM Start	5.87	Rating **	U	Issue No.		217	
LM End	5.87	Issue Type +	Ма	Location *	LS		
Earthen Levee			GPS La	atituc	le/Longitude		
Category				Start		End	
Trim / Thin Trees			37.8740	90°	37.874090°		
пеш				-121.3331	62 °	-121.333162°	
DWR ID	DWR_RD0524_01_s _ 2016_217						
		Comn	nent Cod	de			
T1: Trim t	rees to at I	east five feet	above g	round level.			
		Inspecto	or Comm	nent			
Untrimmed	d walnut tre	ee on landwar	d slope.				



Looking west at walnut tree on landward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.89	Rating **	U	Issue No.	119		
LM End	5.89	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category			Start		End		
Slope Stability			37.8738	93°	37.873893 °		
			-121.332978 °		-121.332978 °		
DWR ID DWR_RD0524_01_s _ 2012_119							
		Comn	nent Cod	de			
S3 : Repai access wh		slope damaç le.	ed by ve	ehicle traffic	and	prevent	
		Inspecto	or Comm	nent			
Landowne	r is using c	damaged area	as a rai	mp.			

LM Start	5.89	Rating **	U	Issue No.	119 (cont)
LNAFad	E 00	Iccuo Typo +	Mo	Location *	1.0



Looking west at unauthorized ramp and landside slope damage.

Photo 2 of 2: FA\_2016\_RD0524\_107\_119\_20160929\_00184.jpg



Looking southwest at damaged slope and ramp on landside slope.

LM Start	5.92	Rating **	U	Issue No.	200			
LM End	5.92	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory		Start		End				
Item	Vegetation			37.8736	23 °	37.873623 °		
пеш			-121.332585 °		-121.332585 °			
DWR ID	DWR_RD0524_01_f _ 2015_200							
		Comn	nent Cod	de				
V2 : Remo	ove the wild	d growth other	than na	tive grasses	s fro	m the levee		
		Inspecto	or Comm	nent				
Oleander	bush on lai	ndward slope.						



Looking south at oleander on landward slope fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.96	Rating **	U	Issue No.	120			
LM End	5.96	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category			Start		End			
Item	Trim / Thin Trees			37.8733	47°	37.873347°		
item				-121.332028 °		-121.332028 °		
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_120							
		Comn	nent Cod	de				
T1 : Trim t	rees to at	east five feet	above g	round level				
		Inspect	or Comm	nent				



Looking south at untrimmed trees on landward slope and toe.

LM Start	6.00	Rating **	М	Issue No.		933			
LM End	6.00	Issue Type +	Ma	Location *	LS				
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude			
Category			Start		End				
Item	Slope Stability			37.873047°		37.873047°			
пеш			-121.331408°		-121.331408°				
DWR ID	DWR_RD0	DWR_RD0524_01_s _ 2012_933							
		Comn	nent Cod	de					
S2 : Repai where pos		slope damag	jed by fo	ot traffic an	d pr	event access			
Inspector Comment									
Landowner cut steps into landside slope.									



Looking north at steps cut into landward slope.

LM Start	6.02	Rating **	M	Issue No.	191			
LM End	6.02	Issue Type +	Ma	Location *		LS		
Category	Earthen L	GPS Latitude/Longitude						
Calegory				Start		End		
Item	Vegetation			37.8728	44 °	37.872844	0	
item				-121.3310	70°	-121.331070	0	
DWR ID	DWR_RD0							
Commont Codo								

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Cactus at landward toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.15	Rating **	U	Issue No.		81
LM End	6.15	Issue Type +	Ма	Location *		LS
Earthen Levee				GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroachments			37.8710	97°	37.871097°
item					00°	-121.330100 °
DWR ID DWR_RD0524_01_s _ 2015_81						
		Comn	nent Cod	de		
TR : Tree	or limb					
			•			
		Inspecto	or Comm	nent		
Large tree fallen across levee crown blocking access. Fallen tree branches and limbs left on landward slope.						

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4	1/1/2	
ing woot of troo b	ranahaa and limba laf	t an landurard aboutder a

Photo 1 of 4: FA\_2016\_RD0524\_107\_81\_20160929\_00132.jpg

Looking west at tree branches and limbs left on landward shoulder and slope. (Spirng 2016)

# LM Start 6.15 Rating \*\* U Issue No. 81 (cont) LM End 6.15 Issue Type + Ma Location \* LS

Photo 2 of 4 : FA\_2016\_RD0524\_107\_81\_20160929\_00133.jpg



Looking south at tree branches and limbs left on landward shoulder and slope. (Spring 2016)

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

6.15	Rating **	U	Issue No.		81 (cont)	
6.15	Issue Type +	Ма	Location *		LS	
Category Earthen Levee					e/Longitude	
			Start		End	
Encroach	Encroachments			97°	37.871097°	
			-121.3301	00°	-121.330100°	
DWR ID DWR_RD0524_01_s _ 2015_81						
	Comn	nent Cod	de			
or limb						
	Inonacto	or Comm	ant.			
	mspecio	or Comm	ieni			
Large tree fallen across levee crown blocking access. Fallen tree branches and limbs left on landward slope.						
	6.15 Earthen L Encroach DWR_RD0 or limb	6.15 Issue Type + Earthen Levee Encroachments  DWR_RD0524_01_s _ 201 Commor limb  Inspector	6.15 Issue Type + Ma  Earthen Levee  Encroachments  DWR_RD0524_01_s _ 2015_81  Comment Cocor limb  Inspector Comment fallen across levee crown blockies	6.15   Issue Type +   Ma   Location *    Earthen Levee   GPS La    Start    Encroachments   37.8710    -121.3301    DWR_RD0524_01_s _ 2015_81    Comment Code    or limb    Inspector Comment    fallen across levee crown blocking access.	6.15 Issue Type + Ma Location *  Earthen Levee	

LM Start	6.15	Rating **	U	Issue No.	81 (cont)
LM End	6 1 5	Issue Type +	Ma	Location *	LS



Looking southwest at large tree across levee crown. (Fall 2015)

Photo 4 of 4: FA\_2016\_RD0524\_107\_81\_20160929\_00135.jpg



Looking south at large tree across levee crown. (Fall 2015)

LM Start	6.17	Rating **	U	Issue No.		98
LM End	6.17	Issue Type +	Ма	Location *		LS
Cotogony	evee	GPS La	atitud	e/Longitude		
Category				Start		End
Item	Trim / Thin Trees			37.8708	42°	37.870842°
пеш				-121.3300	00°	-121.330000 °
DWR ID DWR_RD0524_01_s _ 2012_98						
		Comn	nent Cod	de		
T1: Trim t	rees to at I	east five feet	above g	round level.		
			_			
Inspector Comment						



Looking southeast at untrimmed trees at landward toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.17	Rating **	М	Issue No.		97
LM End	6.17	Issue Type +	Ma	Location *		LS
Category	Earthen Levee					e/Longitude
Category				Start		End
Item	Vegetatio	n		37.8708	40°	37.870840 °
пеш					93°	-121.329993 °
DWR ID	DWR_RD0	524_01_s _ 201	2_97			
		Comn	nent Cod	de		
V2 : Remo	ve the wild	d growth other	than na	tive grasse	s fro	m the levee
		Inspecto	or Comm	nent		

No Photos

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement